

UNIVERSAL
LIBRARY



137 534

UNIVERSAL
LIBRARY

TRAVELS IN AFGHANISTAN



THE MACMILLAN COMPANY

NEW YORK • BOSTON • CHICAGO
DALLAS • ATLANTA • SAN FRANCISCO

MACMILLAN AND CO., LIMITED

LONDON • BOMBAY • CALCUTTA
MADRAS • MELBOURNE

THE MACMILLAN COMPANY
OF CANADA, LIMITED

TORONTO

TRAVELS
IN
AFGHANISTAN

1937-1938

ERNEST F. FOX

NEW YORK
THE MACMILLAN COMPANY
1943

Copyright, 1943, by
THE MACMILLAN COMPANY.

All rights reserved—no part of this book
may be reproduced in any form without
permission in writing from the publisher,
except by a reviewer who wishes to quote brief
passages in connection with a review written
for inclusion in magazine or newspaper.

FIRST PRINTING.

PREFACE

THIS is a journal of travel and exploration in Afghanistan.

In the summer of 1937 I was commissioned by an American company, along with two other American geologists, to spend a year in Afghanistan exploring for oil and minerals. We left New York in August, sailed to India, travelled by rail to Peshawar, drove by car through Khyber Pass to Kabul, and then began our separate explorations. During the following autumn, winter, and spring I crossed and recrossed Afghanistan by car (which now is easy), crossed the country once by air, and in addition, travelled roughly seventeen hundred miles on horseback and on foot in the interior mountain districts, many of which had never previously been visited by any Westerner. The journal is based on a diary and field notes kept during this period.

The origin of the journal is threefold. Every field engineer keeps a factual record in the field, in the form of maps, sketches, and written notes. This was its beginning. Then, before I left New York, as a member of the Explorers Club I was commissioned to carry the club's flag in Afghanistan—which implied that I do some original investigations, and that I submit a written account of them; so I kept a much fuller diary than I had ever done before. This was its growth. Finally, the requirement of a written account of the flag's journey, the very great interest in Afghanistan evidenced in England and at home (where the average notion of the country is based almost entirely on Kipling's stories and verses of the Northwest Frontier Province), and the paucity of intimate stories of travel in Afghanistan, led to the editing of the notes and diary. This was its maturity.

As stated in the beginning, this book is a journal of travel and exploration. I qualify the last two terms, particularly disliking

the word 'exploration' because it is now so often prostituted. Almost any week-end trip from an urban center to the country now is geographical "exploration"! A Cook's tour of Bali is "exploration"! A Bostonian honeymoon in Alaska, and climbs a hill where sourdoughs regularly live, and it is "exploration"! A regular trip on the South African Railway is an "expedition"! I prefer to call this travel. By this token much of my journeying in Afghanistan was travel: the journey through Khyber Pass to Kabul, and from Kabul north across the mountains to the Soviet border, and from Kabul again south to Kandahar and on west to Herat—all were over highways that had been travelled before, mapped, and written about. Even my journey up the Kokcha through Badakhshan partly duplicated one that had been described before—by Marco Polo; and the route we followed into Ghor was well mapped by the India Survey. But much of my time in Afghanistan also was spent away from the main trails, living off the country with the Afghans in districts not previously visited by any strangers, not mapped, not reported on. This is exploration—if the routes followed are charted and described. My journeys over the Khwaja Muhammed Mountains from Anjuman to Farkhar, from Ghor south to Girishk, and from Girishk up the Helmand River to Kabul were of this nature.

In editing the journal I have kept two things in mind: that it be mainly descriptive rather than interpretive, and that truth take precedence over journalism. The first consideration led to the chronological order of reporting; that is, I have described things just as we went along, rather than treating them topically, which would have been much simpler. This has led to some repetition, although much of my repetition is intentional, tolerated in order to capture and record the slight differences between the different tribes, the different valleys, and the different provinces. The second consideration means that I have tried not to be sensational (as most accounts of Afghanistan are), lest the temptation be too great and the truth be colored. In some ways the result bears likeness to a guidebook—which possibly makes it sound most uninteresting. And yet that is exactly what we wanted to

read when we started for Afghanistan, and it is exactly what the fellow will want to read who goes there after us.

As indicated above, the source of my material is almost entirely observation in the field. There is this exception, that I have used *Encyclopædia Britannica* as authority for all my historical sketches. My notes on the traditional customs, religion, and habits of the people are based largely on conversations with my Afghan interpreters, on their answers to my many questions—therefore, this responsibility is theirs. Naturally, much of what I have written is also based on my own first impressions. As we all know, first impressions are not always correct. This responsibility is mine. The account is as accurate as I can make it. The photographs and maps are all my own, although I have used to the fullest possible advantage the various sheets of the general map "India and Adjacent Countries (Afghanistan)," by the India Survey.

I have not used the correct names of all the Afghans of whom I speak, but I have used the correct names and titles of all the officials with whom I had dealings.

Perhaps some of my Afghan friends, who chance to read what I have written, may think I have been too critical of them at times. I know that they like compliments, as do we all. But I believe that a frank expression of opinion better serves a friend than suavity; and I have tried to give an entirely unpolished account of my dealings with the Afghan people. Since the Kabul government is now committed to Western technical assistance it is as necessary for them to understand a Westerner's point of view as for us to know their temperament—and if I know the Afghans, they appreciate this fully. In anticipation of their verdict, however, I want to emphasize that nowhere in the world where I have gone, among a people so different from my own, have I met those whom I esteem more highly than the Afghans, or those with whom I would rather work again. Their honor is their bond; their hospitality is full and generous; and their tolerance is more honest than our own.

In a few instances, I have briefly mentioned Afghanistan in the international scene. It should be stated here that the journal was written in 1937-38, and edited shortly thereafter, and that noth-

ing in this connection has been revised, added, or omitted since the beginning of the present war.

ERNEST F. FOX

Fairbanks, Alaska

July, 1942

GEOGRAPHICAL AND HISTORICAL SKETCH OF AFGHANISTAN

AFGHANISTAN, IN south central Asia at the western end of the great Himalayan barrier, is at once the buffer between India and Russia, and the spillway by which all important trails from Asia Minor, Russia, Siberia, and Mongolia drain into India.

The Kingdom covers over 260,000 square miles of mountain land and desert—an area as large as Texas. It begins in the High Pamirs where the head of the Oxus feeds on everlasting snow more than 24,000 feet above the sea—more than 4,000 feet above the top of Mount McKinley, the highest peak in North America. It ends in the Seistan desert lowland where the swollen Helmand River vanishes in heat and sand. It rests astride the mighty Hindu Kush, and the Koh-i-Baba, and other lesser mountain ranges which trend southwest from the Pamir massif to Shebar Pass, and then melt away in fingers that spread fanwise north and south and west to friendly Iran, which forms the western boundary. On the south it is bounded by a desert barrier, beyond which lie Baluchistan and the Indian Ocean. Of the Soviet territories north of the Oxus, Afghanistan meets Russian Turkistan, which now includes the old khanates of Khiv, Bokhara, and Samarkand; and of the Indian territories on the east it bounds the Northwest Frontier Province, including western Kashmir and turbulent Waziristan.

Afghanistan is an arid land. The southwest monsoon brings rain only to the eastern valleys that lead down to the Indus. Elsewhere the country relies on light spring and autumn rains, and winter snow that comes on northwest winds. These snow winds are intensely cold. In the north the climate is extreme, with an annual temperature range from -12° to $+120^{\circ}$ F. Throughout the mountain districts the snow lies on the ground for several

months while the villagers remain inside their huts. Everywhere the summer heat is great, especially near Kandahar and west throughout the windy, dusty Helmand desert.

Afghanistan is a barren land with naked, sun-baked rocky slopes. But there are green oases under irrigation on the south-east plains near Kandahar, on the loess slopes of the northwest in Afghan Turkistan, along the rivers, and elsewhere tucked away in hidden mountain valleys wherever men can find a little water and a little soil. Some of the world's finest fruit grows in these hidden garden spots behind mud walls, and they raise enough grain to satisfy the people.

Afghanistan is a healthful land—except in case of a bullet or a Khyber knife; and the Afghan men are sturdy men. There is some fever in the lower parts where rice is grown, but the flooded areas are small and isolated. The desert dust is wicked on the plains, but the desert plains are mostly uninhabited. The villages and towns have never heard of sanitation, but the sun and the high dry mountain air do much to cure polluted streams.

Afghanistan means "Land of the Afghans"; and, as popularly used along the Indian frontier, *Afghan* applies to any inhabitant of Afghanistan regardless of origin or language. Strictly used, the term applies only to the dominant section known as the Durani. Legend associates the Durani Afghans with the tribes carried away captive from Palestine to Media by Nebuchadrezzar. They call themselves *Ben-i-Israil*, or "Children of Israel," and claim descent from King Saul through a grandson named Afghana. Foreigners acquainted with the Afghans accept the story of their Hebrew ancestry. The Ghilzai, another section almost as powerful as the Durani, claim to be of Turkish origin. The Hazaras, Uzbeks, Kafirs, and other tribes within the country are subject races. The Hazaras are almost pure Mongolians; the Uzbeks are a mixture of Mongol, Turk, and Persian; the origin of the Kafirs, until recently an independent pagan tribe, is little known.

There may be 7,000,000 people in Afghanistan, or there may be twice that many. It is difficult to estimate their number and still more difficult to count them. Outside the few towns, possibly half the people in the country live in widely scattered villages and

depend on agriculture for their livelihood. They seldom travel and are seldom visited and know little of the world beyond the limits of their isolated valleys. The other half are nomad shepherds who live in tents and travel constantly. This division into villagers and nomads transcends their division into clans and tribes, for of the same tribe a part may be settled and a part nomadic.

Persian and Pushtu are the dominant languages spoken. Until recently, Persian was the court language; and it is still the language of the mullahs, or priests, and of the Afghan nobles. But Pushtu is more widely spoken in the east and south and on the Indian frontier, and is now Afghanistan's official language. Turki is spoken in the north.

Afghanistan is the stronghold of the Sunni sect of Islam, though the Hazaras and some other tribes are Shiah. Some of the Durani Afghans are fanatical ghazis, men who have vowed their lives to the extinction of other creeds. Tribal law, with the custom of hospitality, and the vendetta, are rules of life, although in general their civil law is the law of Islam derived from the mullahs' interpretation of the Koran.

Afghanistan's history is one of civil strife and foreign wars. She has been successively the center of great empires ruled by foreigners, a congeries of petty states, and a dismembered country furnishing provinces to other monarchies. She stands on the crossroads of Central Asia and embraces all the open trails that lead to India from the north and west. Invasions by foreign armies, lusting for the wealth of India, mark the high lights of her history. She was part of the old Persian Empire until conquered by Alexander the Great, five hundred years before the birth of Christ. A Greek dynasty followed Alexander, and the recent paganism of the Kafir tribes seems to embrace some faint reflection of Greek mythology. Three hundred years later she was part of a Central Asian dynasty and had accepted Buddhism. Buddhist relics still abound at Bamian and Haibak and in the Kabul valley. In the seventh century Arab conquests and Islamic propaganda reached the western provinces, while Kabul was the center of a kingdom under Turki and Hindu kings. The Mohammedan re-

xii Geographical and Historical Sketch

ligion was accepted shortly after. We next hear of the petty state of Ghor, in the southern ranges of the Safed Koh, and then of the dynasty of Ghor that may have been of Afghan origin. Ghor was ravished in the thirteenth century by the heathen Mongol hordes of Genghis Khan, and was ruled by Mongols for a hundred years thereafter. In the early sixteenth century Baber occupied Kabul, after being driven from his native land beyond the Oxus, and made it the capital of the empire that he founded. This extended from the Oxus south to Kandahar and east into India as far as Delhi; but Herat in the west belonged to Persia. In the early eighteenth century Nadir Shah, one of Persia's greatest monarchs, conquered Kandahar and Kabul. But after his death the Afghan chiefs in Kandahar chose as their leader Amad Khan, an Afghan chief who had risen to high rank in the Persian army, and for the first time in history Afghanistan became a distinct political entity ruled by an independent native sovereign. The kingdom then extended from the Caspian eastward over the Punjab and Kashmir and Sind, and Baluchistan and Khurasan were tributary states. The Oxus, as usual, marked the kingdom's northern boundary. Amad Shah died in 1773, and his son transferred the capital from Kandahar to Kabul; but his kingdom fell apart soon after.

English-Afghan relations began in 1809 when the British East India Company's Government in India, alarmed by the intrigues of Napoleon in Persia, sent an envoy to Peshawar; but Russia soon succeeded France as the bugbear of the British in the East, and during the last one hundred years Afghanistan has been pressed between the Russian Bear and British Lion, and her role in history has been that of a buffer state between two jealous rivals.

Russia, during this time, by her conquest of Turkistan, advanced south to the Oxus. And Britain, by conquest also, advanced northwest into the Khyber region. But Russia has not invaded Afghanistan, and Turkistan was not an Afghan province. Britain's advance was through territory once controlled by Kabul, and British armies have three times occupied Kabul. Thereby the British have succeeded admirably in making themselves Afghanistan's best hated neighbor.

The history of Britain's Afghan wars reads like a story of blundering adventure. It is worth repeating briefly here because this recent phase of her history largely accounts for the Afghanistan we know from fiction. Almost our entire impression of the Afghans is based on stories from British army sources—stories of treachery, intrigue, cruelty, and murder among the tribesmen. No doubt these stories are true; but they refer mainly to the tribes along the Indian border during war, and do not necessarily characterize all Afghanistan; and one is led to wonder, too, to what extent the intrigues and driving schemes of the British themselves during that period may have led to the behavior of the tribesmen. After all, the Afghans fought the British—and fought well—for their national existence against tremendous odds.

The first British envoy to the Amir's court in Kabul was well received. In 1836, Sir Alexander Burnes was sent to Kabul, ostensibly on a commercial mission, although the British were mainly concerned over Russian intrigue there. The Amir, Dost Mohammed, had established his authority in Kabul only the year before Burnes came. He was in trouble too, for only Kabul, Ghazni, and Jalalabad remained of the former Afghan Empire. Herat, always a Persian rather than an Afghan town, was alienated; Badakhshan and Afghan Turkistan had gained their independence; and Ranjit Singh, an adventuring military genius from Lahore, had conquered the Punjab and Kashmir and, by defeating an Afghan army, had gained the country around Peshawar. There was a chance, therefore, for envoy and Amir to make a deal. Burnes was instructed first to oppose the attempt of Persia to recover Herat. Russia might strike at India through Persia. It appears that Dost Mohammed was receptive, but he asked Burnes in return to pledge his government to aid Afghanistan against Ranjit Singh. Burnes refused and, disappointed, the Amir turned to a Russian envoy who then arrived in Kabul. The Governor General of India, Lord Auckland, made this a cause of war, and in 1838 the British "Army of the Indus" occupied Kandahar, took Ghazni by storm, and entered Kabul, while a smaller British detachment advanced through Khyber Pass. Dost Mohammed surrendered and was sent to India, and a puppet

ruler was placed on his throne. It seemed that the war was over, and the greater part of the British army returned to India. Sir William Macnaghten remained as envoy, and Burnes stayed with him; and they kept a small army of British and Company troops in Kabul for their protection. But the trouble was, in fact, only beginning. In 1841 revolt broke out in Kabul, and Burnes and Macnaghten and other officers were killed. The British then agreed to quit the country and were promised safe conveyance on the way. The retreat began in January during severe winter weather. They were immediately attacked by the Afghans; and, of the 690 British and 3,810 Indian troops and about 12,000 camp followers, only one wounded man reached the British garrison at Jalalabad alive. A few persons, mostly English ladies, were taken prisoner.

Within a year another British army, bent on revenge, forced the Khyber Pass, relieved Jalalabad, and reoccupied Kabul, where they destroyed the citadel and the old bazaar. They recovered the prisoners and then evacuated Afghanistan. Dost Mohammed was permitted to return to Kabul and assume the government.

In 1849, there was another brush with Dost Mohammed when he came to the aid of the Sikhs during the Second Sikh War. He was again routed, and the Peshawar territories were annexed to British India. Six years later an alliance was concluded between the Amir and the British, and Afghanistan was given a subsidy and arms to strengthen her defense against Persia.

Dost Mohammed's successor, his son Sher Ali Khan, was less disposed to deal with England after she refused to guarantee his sovereignty; and he refused to admit British agencies into the country although he received a Russian Mission to Kabul. Again the British made this a cause of war, and again a British army from the south occupied Kandahar, and took Kalat-i-Ghilzai and Girishk, and another British army marched and fought through Khyber Pass.

The Amir fled and died, and his son made peace with the British. But the British imposed the terms of peace. They demanded and received the Khyber region and other border territory, and they demanded and were granted a Residency in Kabul

and, through it, control of all Afghanistan's relations with her neighbors. Such peace was odious to the ranks in Kabul; in less than four months' time the Resident, with all his escort, was killed, and his head carried in triumphant protest through the new bazaar. Then the British armies again converged on Kabul and remained in Kabul until the British government recognized a new Amir, Abdur Rahman Khan, a grandson of Dost Mohammed. While they were there, another Afghan column, advancing from Herat, inflicted another crushing defeat on a brigade of British soldiers in the south and then invested Kandahar. General Roberts led a relieving force from Kabul and defeated the besiegers. Finally, in 1881, with Abdur Rahman seated on the throne, British arms again withdrew from the "Land of the Afghans."

Abdur Rahman had been recognized as Amir of Kabul only, but within a year he made himself master of Kandahar and Herat also; and during the following twenty years of his reign he gave Afghanistan such a government as she had never known before. He retained absolute power in his own hands. He organized a standing army to replace the traditional feudal militia under tribal chiefs, and with this force he established an efficient central administration, and imposed and insured the collection of assessed taxes for public revenue. He is reported to have been cruel and ruthless; but he relieved his subjects of the petty tyranny of local chiefs, and he suppressed highway robbery and violent crime.

The British made no attempt to curb his authority within the country; but they did dictate his foreign policy, which he agreed to conduct according to the wish of Britain in return for an annual subsidy and arms to strengthen the defense of his north-west borderlands.

It is probable that Abdur Rahman fully appreciated the advantages which his country might have gained from projects such as telegraphs, railroads, and mines. But he held that these advantages would have to be purchased at the price of Afghan independence by permitting the penetration of foreign interests. So he opposed them.

His son Habibulla, who succeeded him in 1901, opposed these

projects also. But he was more susceptible to modern influences than his father and, by the time of the World War, had introduced such inventions of the devil and the infidels as motorcars, telephones, newspapers, and a hydroelectric scheme to supply Kabul with light. He had founded Habibulla College, a high school in Kabul, with teachers from India; but he rejected all attempts by foreign interests to gain concessions in Afghanistan and, like his father, he forbade all foreigners to travel in the country.

Habibulla loyally observed the conditions regarding Britain's control of his foreign affairs imposed upon or agreed to by his father; and during the World War he loyally abided by his agreement with ~~Great~~ Britain to maintain Afghanistan's neutrality. This was difficult to do with Turkey, the chief Islamic power, aligned against ~~Great~~ Britain; and, on the basis of religion, a strong pro-Turkish and anti-British element gained strength within the country.

Habibulla was assassinated in 1919, and Amanullah, his nephew, was recognized as King. Amanullah's first important act was to attack ~~Great~~ Britain. The war was brief, and the peace was bright. The British subsidy was discontinued, and the two governments agreed to respect each other's independence in both domestic and foreign affairs, and to exchange legations between London and Kabul. Britain after the World War thus voluntarily ended her domination of the country. Amanullah became a national hero, and the Afghans still celebrate each year the signing of their independence with almost as much gusto as they celebrate the Day of Ramadan.

Amanullah next reorganized the government. He dropped the title "Amir" and organized a legislative and state assembly under his presidency as King. Governors were appointed to administer the provinces, and representatives were chosen by the people for the assembly. This reform was popular too; and this form of government remains today and has done much under the present stronger government to unify and stabilize the country.

After that the new King's popularity was brief. He was more enlightened than the generality of his subjects but less able than

his predecessors in dealing with them. He soon departed from the traditional policy of his dynasty by opening up his country to Western Civilization, admitting foreigners, and exchanging legations with other nations. This alienated the mullahs. He instituted a scheme for female education, ordered the abolition of the purdah, or veil, which still masks every Afghan woman in Kabul, and imposed other unpopular social reforms which were considered by the mullahs as dictates of the devil through a *kafir* king. This angered them. He neglected the army, and this encouraged them to foment revolution. When the revolution came in 1928, under the leadership of Bacha Sakao the "Bandit King," he was unable to suppress it and was driven into exile.

Since Amanullah's reign, the leadership has passed to three different kings; but the central government has remained strong and steady, save during a brief chaotic period following the revolution. The present government has sponsored many of Amanullah's reforms, but has moved much more cautiously than he. Afghanistan is a poor country, and the government has wisely placed more emphasis on developing her natural resources than on changing her existing social order. It has cleverly enlisted the support of the mullahs, and is gradually making progress.

Afghanistan still dislikes the foreigner. The mountaineers' natural love of independence, their strongly militant religious sentiment, and centuries of unpleasant experiences with foreign invaders have bred this feeling. But the present Afghan leaders realize that they can employ to advantage the technical achievements of the West. During the last few years they have engaged many foreign engineers to supervise construction projects. But all these men were hired and have been paid as individuals by the Afghan government. Before 1937 no foreign *concessions* were ever granted; and, significantly, no railroad has *ever* been permitted to cross the Afghan border.

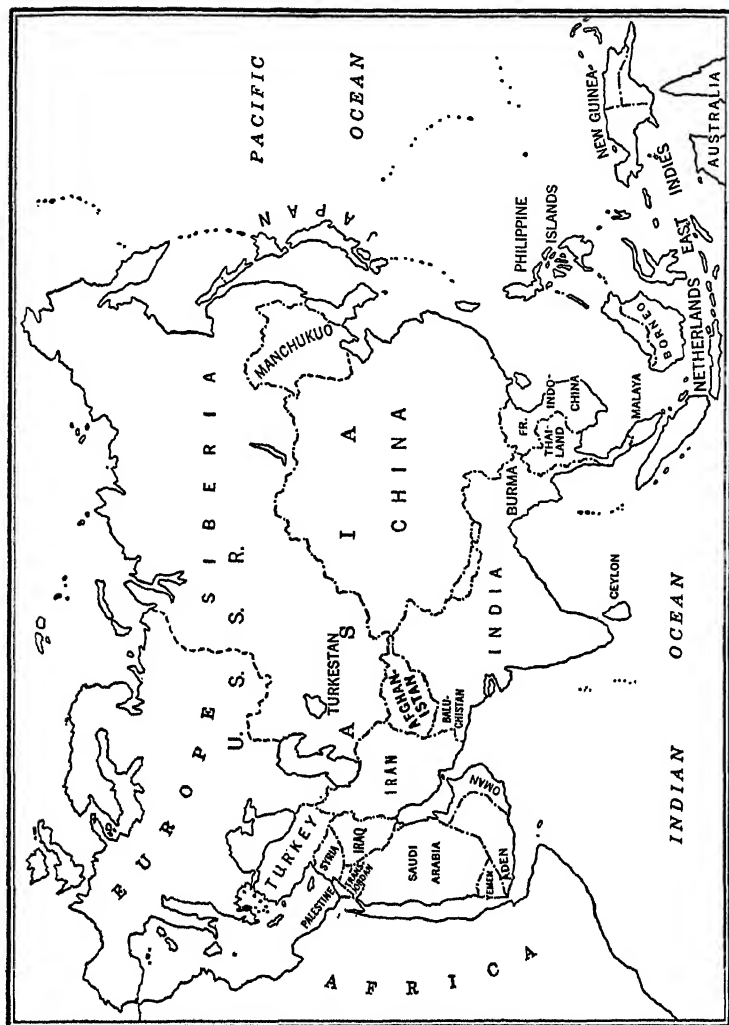
Then, in the spring of 1937, in pursuance of their forward policy, the Afghans broke all precedents by granting to an American company a concession controlling the petroleum resources of the entire country; and they further granted to this same company the right to explore the entire country for mineral deposits, pend-

xviii Geographical and Historical Sketch

ing later discussions that might have led to a mineral concession also. This was by far the boldest and probably the most progressive move ever made by any Afghan government; and it was a move to which the Afghans naturally, and rather nervously, attached a high importance. They had great hope of easy wealth from oil and mines.

In furtherance of the second aim—minerals—I went to Afghanistan; and in furtherance of the first—oil—my good friend “Howdie” Kirk and his colleague accompanied me. A company representative was stationed in Kabul; later several other Americans arrived. But before a year was up, and before our work was far advanced, the company surrendered its concession rights and withdrew all its men.

Several reasons for the withdrawal were given (the unsettled international scene, changing economics of petroleum, etc.), none of which was plain to the Afghans. They knew only that their first experience with peaceful, foreign penetration had backfired in a way that might even have startled the canny old Abdur Rahman; and it was bewildering to them that Americans should give up so easily a favor that others had fought so hard and long to gain. Subsequent events, no doubt, have helped their understanding.



CONTENTS

	PAGE
Preface	v
Geographical and Historical Sketch of Afghanistan	ix
CHAPTER	
I. Through Khyber Pass to Kabul	1
II. Over the Hindu Kush to Badakhshan	25
III. To the Mines of Lead and Lapis Lazuli	45
IV. Across the Khwaja Muhammed Mountains and Down the Ab-i-Pew	82
V. Some Days in Faizabad	105
VI. In Search of Gold Along the Oxus River	114
VII. From Kabul to Herat Through Kandahar	128
VIII. A Winter Journey into Ghor	145
IX. From Ghor Through Gulistan	175
X. On Nomad Trails in the Koh-i-Verna	191
XI. Up the Helmand Valley Through Hazarajat	222
XII. On the Highroad Across Afghanistan	261
Geographical Directory	281

ILLUSTRATIONS

The Upper Kokcha River Country, region of the lazurite mines	End-paper
	FACING PAGE
Entrance to Khyber Pass from India	6
The Northwest Frontier on the road through Khyber Pass	6
Beyond Khyber Pass on the road to Kabul	7
Street scene in Kabul	14
The new Bazaar in Kabul	14
The senate chambers that were never occupied—Kabul	15
A village near the Capital	15
Gorbant Valley looking east from Shebar Pass	30
Pack camels coming up from Turkistan	30
Street scenes in Khanabad	31
Bridges on the road to Faizabad	46
Main street in Faizabad	47
Climbing down from the sulphur mine	62
Threshing wheat at Scarzar village	63
Bridge over the Kokcha River between Faizabad and Jurm	78
The District of Jurm in the Kokcha Valley	78
Smala leads the way through the upper Kokcha Valley	79
High on the road to Lower Robat	79
Russak poses on the trail near Anjuman	94

CONTENTS

	PAGE
Preface	v
Geographical and Historical Sketch of Afghanistan	ix
 CHAPTER	
I. Through Khyber Pass to Kabul	1
II. Over the Hindu Kush to Badakhshan	25
III. To the Mines of Lead and Lapis Lazuli	45
IV. Across the Khwaja Muhammed Mountains and Down the Ab-i-Pew	82
V. Some Days in Faizabad	105
VI. In Search of Gold Along the Oxus River	114
VII. From Kabul to Herat Through Kandahar	128
VIII. A Winter Journey into Ghor	145
IX. From Ghor Through Gulistan	175
X. On Nomad Trails in the Koh-i-Verna	191
XI. Up the Helmand Valley Through Hazarajat	222
XII. On the Highroad Across Afghanistan	261
Geographical Directory	281

ILLUSTRATIONS

The Upper Kokcha River Country, region of the lazurite mines	End-paper
	FACING PAGE
Entrance to Khyber Pass from India	6
The Northwest Frontier on the road through Khyber Pass	6
Beyond Khyber Pass on the road to Kabul	7
Street scene in Kabul	14
The new Bazaar in Kabul	14
The senate chambers that were never occupied—Kabul	15
A village near the Capital	15
Gorband Valley looking east from Shebar Pass	30
Pack camels coming up from Turkistan	30
Street scenes in Khanabad	31
Bridges on the road to Faizabad	46
Main street in Faizabad	47
Climbing down from the sulphur mine	62
Threshing wheat at Scarzar village	63
Bridge over the Kokcha River between Faizabad and Jurm	78
The District of Jurm in the Kokcha Valley	78
Smala leads the way through the upper Kokcha Valley	79
High on the road to Lower Robat	79
Russak poses on the trail near Anjuman	94

	FACING PAGE
The summit of Wursach Pass	95
Wursach	95
The author's party and the governor's men at Farkhar	110
The Governor of Faizabad and his daughters	110
Washing gold on the Kokcha River	111
The Chief of Duang (seated right) and his men, with the author (second from left)	126
The "Goat Game" at Duang	127
"Chil-con-shar"—Valley of Gold	142
Ruins of "Kafir Kala" at Islam Kala	143
Mosque outside Herat	158
A soldier stops to smoke his pipe	159
The author's caravan between Shaoz and Parjaman	174
The author en route to Ghor	175
The Governor of Ghor	182
The Commandant at Ghor	182
The Commandant at Ghor with guard	182
A trooper of Ghor	182
Men of Ghor	183
Bargaining for a raft to cross the Helmand at Ghizao	254
The trail that leads out of Ghizao	254
A village in Hazarajat	255
Early morning in Khonak village—Hazarajat	270
Nomads west of Uni Pass on the High Road across Afghan- istan	271

TRAVELS IN AFGHANISTAN

CHAPTER I

THROUGH KHYBER PASS TO KABUL

AS I ATTEMPT now to write about our travels in Afghanistan I find myself unexpectedly facing a situation not unlike that which first confronted me when I actually started the journey, especially when I neared Afghanistan and started across the frontier. I find my beginning a little timid, a little uncertain, not quite capable of presenting important things importantly or keeping them quite distinct from unimportant things. Certain scenes and incidents stand clear in memory and so force themselves into prominence, while a great amount of connecting detail, in memory having faded to a dimness almost beyond recovery, is barely visible.

It was much the same during my first weeks in Afghanistan. Although a seasoned traveller, in the beginning I was never quite able to integrate the people, the brown desert mountains and wastes, the rich oases, and the walled villages into a national entity. Invariably I found myself seeing the people much as a detached spectator, far back in the gallery, views actors on a stage. Being an engineer, I was more inclined to see clearly what we speak of as "critical points" in landscape: the high and low elevations of mountains and valleys, the main trails, and the strategic cities on the main trade routes. Later, after I had lived with them and so come closer to them, my view of the people became clearer, my "critical points" drew out of focus, indistinct in the background.

As I have seen Afghanistan, so I should present it. Therefore, in the beginning, "main trails and key cities" are likely to be my theme; later, perhaps, people may dominate the scenes.

There are other reasons why trails and cities are a traveller's first interest in Afghanistan:

Communication is his first problem. There are no railways, no hard-surfaced motor roads, and but two landing fields in the whole country. Therefore he studies trails.

Cities are points of departure and destinations: one normally travels from city to city, or from village to village. Cities and villages in Afghanistan are distinct units of the country. Collectively, except the nomads, they are everything. Their low, brown adobe huts cluster tightly together—frequently around a blockhouse, a fortress, or a castle. They are enclosed by walls, and outside the walls are open fields or desert. They seldom sprawl over the landscape like American cities. Also, most Afghan cities are very ancient, and plainly reveal their antiquity; therefore, to an American, they are interesting.

Entering Afghanistan from India, one begins the journey from an Indian frontier city—usually with Afghans, and always within sight of the hot, barren, brown, mysterious, much maligned Afghan mountains. Entering from the southeast, one's depot of departure is Quetta; entering from the northwest, one will leave from Peshawar. One is not likely to enter Afghanistan from any of the border towns between. We entered from the northwest; therefore, we started from Peshawar.

Peshawar city is the portal to Khyber Pass, the great caravan-serai at the end of the trail that comes down through the Khyber, the depot where Afghan *provindahs*¹ from Turkistan and the land of the Ghilzai dump their loads each autumn and wait for spring to lead them back through Khyber. And it is the end of all the trails into the northwest from the plains of India—therefore the trading center "where Kurd and Kafir meet." Few Afghans who reach Peshawar have cause to wander farther into India; and few travellers from the east who venture this near the Afghan border care to go on through the Pass.

In the narrow, crowded, ancient streets one meets the men of many tribes and many nations, milling leisurely in pursuit of gain or pleasure, engaged in border espionage, or simply sitting

¹ Travelling Afghan gypsy merchants.

listlessly by the way, waiting stoically as if their future held promise of something brighter than the glaring sun that beats down upon the crowd.

In the old bazaar the coppersmiths and cobblers work as they have worked for centuries; and saddle makers feed the needs of mounted men on both sides of the border; and merchants display goods from all of Asia and the Orient.

In the Cantonment, outside the town, the Union Jack sags listlessly above the field, like the tired sentinel of a static Empire—and the Army rests upon its guns, and glories in its past. For Peshawar is an outpost of the British Empire, the capital and most important military center of India's turbulent Northwest Frontier Province. But it was once the residence of Afghan kings, and the Afghans say that they will occupy the town again one day.

In no place where I have ever been, might one find such a rendezvous of romance and adventure as in this old border town whose past records the fate of empires, and whose present now is charged with Empire's fate! What other city begs more fluently for an inquisitive one to remain awhile and explore behind the masks of her mixed humanity?

But our work and our adventure lie ahead, beyond Khyber Pass, behind old Kafiristan, in the wild Afghan mountain land between the Helmand River and the Amu Daria. We must go on to Kabul and prepare for that. Already nights are cool here on the Northwest Frontier plains. The slow sea voyage east from Suez, and the hot rail journey up the dusty Indus valley, brought us to Peshawar at a pleasant season. But Afghanistan lies higher, and even now the winter's early gusts are flirting with the peaks in Koh-i-Stan, and time is running short for mountain work in Badakhshan. Already we have been a week in India—though still half our kit is held in customs at Karachi. The other members of our party will wait in Delhi till it comes through. They can better afford to wait, for their work more than ours will follow easy trails. We must go on. Our car is packed and serviced for the road. Tonight we will rest in Dean's Hotel, and tomorrow morning early, Allah willing, we will leave Peshawar town and drive through Khyber Pass.

Like all good expeditions we have paved the way ahead as much as possible. Our Company agent has already been in Kabul arranging our reception there, and smoothing border barriers, and enlisting motor drivers and interpreters. He met me in Peshawar two days ago with Noor Said, the quiet, husky Indian Pathan driver who will go with me. And he will follow us to Kabul in the morning.

From Peshawar the Kabul road runs west across the plain that bounds the Kabul River. It leads to Fort Jamrud and, beyond the fort, winds up through a niche cut in the mountain wall and climbs through Khyber Pass. This is the military road to the British fortresses within the Pass; it is the main road into Afghanistan, the ancient caravan trail from India to Central Asia.

On September 17th, Noor Said and I began our journey westward by this road, driving smoothly through the clear, cool dawn, while behind us, stealthily, the white sun rose slowly out of India, and cast our shadows long and thin ahead. Soon, however—before even the long shadows were more than just a little shortened—the road across the even plain was dancing in the lively heat, the mountain wall around the plain was all but lost in the thin, blue haze that crept up imperceptibly about us, and our first day on the Frontier had begun.

We drove slowly, nursing the new car, for much depended upon it and we were heavily loaded and drew a loaded trailer. We had doubts about the trailer. It seemed an impractical appendage to an outfit otherwise compact and serviceable. But at the last minute we needed extra cargo space and so accepted it.

We studied each other, too, for our acquaintance was less than two days old, and neither of us could yet understand a word the other spoke. We took turns at driving, and I recognized at once that Noor Said was an expert. From experience he thoroughly knew the road. And he scowled so fiercely, and twitched his long, stiff black mustache so threateningly at everything on the road that even the passing donkeys gave us undisputed right of way.

About eleven miles out from town, at old Fort Jamrud on the edge of the plain, a sentry of the Khyber Rifles stopped us for

passport inspection and registration, and for toll—five rupees for protection through the pass.

Fort Jamrud guards the Indian entrance to the Khyber route. Jamrud was an old Sikh stronghold when Afghanistan included the Punjab and Kashmir. It was occupied and rebuilt in its present massive form over a century ago by a general under Ranjit Singh; and it came into British hands when the Peshawar Territories were added to British India nearly ninety years ago. It would not last long in modern war, but the thick walls are ample protection against the rifles of the mountain tribesmen, and also against the burning sun, for the old fort now provides good barracks.

The line of Khyber hills that runs behind Jamrud recedes along a minor watercourse which the road now follows westward to the hills. The actual entrance to the pass begins three miles beyond the fort, where the hills close in. From there the road begins to climb and wind and switchback up to Landi Kotal. But our car ran smoothly and without effort, for the road is all hard-surfaced and well graded. The fame of Khyber is not due to its physical prominence as a mountain pass. Actually, it is rather insignificant in a country where not far north the bleak Pamir passes are the highest in the world. The summit is less than thirty-seven hundred feet above the sea, and the total climb from Fort Jamrud is only a little over two thousand feet in twenty miles. But no other pass in Asia possesses such strategic importance now, or retains so many historic associations as this gateway to the plains of India. This is the most direct route by which any modern army from the north might enter India, and this is the place where it must be stopped by a British army. This is the route which British and Afghan soldiers have surged up and down throughout a century, and the route that other adventurers followed before the Afghans. Today, with the British standing guard, the Khyber hills are quiet except for petty border raids. They will remain so until British arms are so weak that a new adventurer is encouraged to risk another onslaught. And there are many now who await that chance.

Actually, however, before modern times, many of the old in-

vasions of India did not come this way at all, as is supposed. Many of them were from the south through Baluchistan or by way of Kandahar and Quetta—still a most likely route. And many of those from the north, that came by way of Kabul, turned aside somewhere below Jalalabad to travel the easier routes north of the Kabul River. But none of these alternate northern routes will pass wheeled vehicles. Hence, the military importance of Khyber and Britain's solid determination to defend it.

A broad-gauge military railway now runs from Peshawar to Fort Jamrud and on through the pass to the border station just beyond the summit. And in places where an army moving up might encounter congestion from the slow-moving camels coming down, a second hard-surfaced road, parallel to the one we followed, is provided. Small forts, like the blockhouses that were built to guard the bridges along the South African railways during the Boer War, command the roads from every vantage point and place each foot of it within range of well aimed rifle and machine-gun fire. What other defenses are hidden in the brown rocky hills along each side are not for casual travellers to see.

We passed the famous signpost by the road that warns all travellers to turn back in time to reach Jamrud by evening, and drove on, climbing past old Fort Ali Masjid which commands the center of the Pass, past the hamlets and towers of the Zakka Khel Afridis, past Landi Kotal where another British fortress closes the west end of the Khyber and overlooks the Afghan plains.

It was off-season for heavy traffic in the pass. A few soldiers sauntered by the way, and a few native tribesmen, each armed with a modern rifle and a bandoleer of cartridges, braved the sun to seek the pleasures of Peshawar. Two strings of loaded camels and some overloaded donkeys came plodding slowly down, and a train of military lorries crawled up with fresh supplies. But few other travellers were on the road. We were a little ahead of the autumn migration of *cafilas* (camel caravans and herds of nomad shepherds) who come down to India for the winter, and much behind the spring influx of *provindahs* who for centuries have bought or fought their way through Khyber Pass to bring the trade of Afghanistan and Turkistan to India.



ENTRANCE TO KHYBER PASS FROM INDIA

THE NORTHWEST FRONTIER ON THE ROAD THROUGH KHYBER PASS





BEYOND KHYBER PASS ON THE ROAD TO KABUL

One's exit from the Pass is as rigidly supervised as one's entrance to it: at Torkham, the Indian border station thirty-five miles west of Peshawar, and just below the summit of the Pass, we were halted again for passport examination by the Indian border guards. When the guards were satisfied with our papers, the sentry stepped aside and the gate was lifted and we crossed the line into Afghanistan.

Then we broke the spell of the Khyber and stopped for petrol, which is cheaper in Afghanistan than in the Northwest Frontier Province, though not so plentiful. There are but two other petrol depots between the border and Kabul, for instance: one at Jalalabad, and one at the little village of Fatehabad sixteen miles farther west. Unless one is fortunate, the latter may be empty. It is well for a motor traveller entering the country to know such things—well, too, for him to know that garages are few and spare parts are not available anywhere, and that he cannot count on the local blacksmith shops to effect makeshift repairs if things go wrong but must rely pretty much upon his own ingenuity.

A few yards past the petrol depot, an Afghan officer and several soldiers were camped in a clump of trees beside the way. I did not see them and would have passed, but Noor Said stopped. They wanted to see our passports too. Their inspection was brief indeed. The officer glanced at our visas, smiled, and saluted, and that was all. After all the formality of getting out of India their reception of us into their own country was simple and direct. But we met more rigid control farther on.

Even if there were no border formalities, and no barriers between the two countries, a traveller could recognize the exact point of entry into Afghanistan. At the border the double improved highway into India ends, and a single unimproved rough gravel track continues down from the barren, hot, rocky mountains that smother Khyber. There, too, the tight defense system of closely spaced blockhouses commanding a narrow defile gives way to a few widely scattered ones in an open valley.

Seven miles from the border, where the road comes down to the Kabul River at Loe Dakka, we were delayed for half an hour while Noor Said sought one official after another to pass our cre-

dentials. It was nearing noon, and the large administration building, and the low mud bazaar and huts beside it, fairly sizzled in the scorching heat that beat upon the parched plain and the little strip of wilted green beside the river. No one took much notice of us when we stopped. A few soldiers slouched about in uniforms designed for cooler weather. Several examined our trailer. One requested that I take no photographs. But most of the station were in siesta, for the Afghans, like other races close to nature in hot lands, respect the sun. To one whose ideas of Afghanistan were mainly gained from fiction it was a dull reception. Here we were in the land of the Shinwaris and Afridis, reputedly the most truculent of border tribes, but no cocked rifles covered us from village walls, and no one went *ghazi* while we were there.

From Loe Dakka we turned westward into the desert valley of the Kabul River, a sandy trough some fifty miles in length, entirely surrounded by high, dry mountains that strain all moisture from the winds that cross them. Slowly we moved forward, hub-deep in sand, with a following wind that kept our dust cloud with us and breathed a furnace draft upon the seared bare hills and dunes of sand beside the way. We closed the car in self-defense against the heat and sand, and watched the motor temperature. But it stayed cooler than our protected seats inside the car.

After forty-two miles of this, we emerged from Hell to the very gates of Paradise, it seemed, and entered a shaded avenue between green trees, where the soil was damp and fresh from irrigation ditches, and the air was sweet with moisture and the fragrance of growing things. This was our entrance into Jalalabad, one of the oases for which Afghanistan is famous throughout all Asia.

Jalalabad lies in the midst of a fertile plain beside the Kabul River, where the carefully tended fields spread at a level that can be flooded, thus breeding in the virgin desert a verdant garden that bears food sufficient for an army. Nor is that the only military significance of Jalalabad. Strategically, it not only commands the Kabul-Peshawar road but dominates the entrance to Laghman—gateway to Kafiristan, and the Kunar valley and the trails into Kashgar and India north of Khyber.

It is said that Baber was the first to recognize the importance of a city here, and that he laid out the beginning of the town before he conquered India four centuries ago. The present city, with its high thick walls and bastions, was built later by Baber's grandson Akbar, who came to be known as Jal-al-eddin, or "Splendor-of-Religion," thus furnishing a splendid name to a splendid citadel.

In modern times Jalalabad has been famous as a winter retreat where the Amirs from Kabul used to come when snow gripped their higher Capital. And it was here, behind the walls that line the road, that Sir Robert Sale managed to defend himself and the city through the winter of the First Afghan War, while the British army in retreat from Kabul was slaughtered on the snow by Afghan tribesmen.

Our way continued past the city wall. I was hungry and suggested lunch. When we passed a soldier by the road, Noor Said stopped and asked where we might find some. Afghans believe in direct action. The fellow stepped on our running board and came along, directing us to the former palace of the Amirs, which is now open as a "hotel," or resthouse. We passed through a gateway into a beautiful garden where groves of date palms and orange trees and pomegranates, and beds of flowers ablaze with color, were arranged formally within the palace walls.

In Afghanistan now, the government maintains such resthouses along the few main routes across the country open to motor traffic. A few, like this one and the one ahead at Nimla, were formerly the Amirs' private lodges; but new ones have also been constructed at convenient stopping places, generally about a day's journey apart. Most of them are connected with one another, and with Kabul, by a government-owned telephone system, and if one telephones ahead, food and lodging will be prepared for guests. Otherwise, although there is always an attendant somewhere about, one must take potluck, or bring one's own food. They are operated for the convenience and safety of travellers, and not for profit, and there are too few travellers in the country to keep them stocked for unexpected visitors. For, after all, there is always tea and bread ready to be served in any Afghan bazaar, and

where there is a guesthouse there is always a bazaar somewhere near.

I knocked at the palace door, not knowing quite what to expect if it should open. It was locked. I wandered about the grounds and soon aroused a husky young pirate, wearing large gold earrings and an amused smile, who seemed agreeably disposed to serve me if only we could understand each other. I finally made him recognize the word *chiah* (tea), and then, to simplify the ensuing difficulty of considering a supplementary menu, I produced a tin of pork and beans that I had brought from India. That gave him an idea, and he came back with an armful of other American tinned foods from the hotel larder and let me take my choice. In half an hour I had a meal. He spread a place for me at the end of a long table in the former banquet hall of kings, and I sat down to eat alone. Noor Said had sought his own repast elsewhere. My pirate friend stood near by facing me, watching intently every move I made and trying hard, at the same time, to decipher the label on the tin that I had opened.

I recalled all of the blood-and-thunder border stories that every one hears on the Frontier—of “Christian dogs” who have been murdered in their sleep for lying with their feet toward Mecca, and of ghazi murders by the score for the salvation only of the ghazi. I tried to remember not to touch the food with my left hand, and hoped that he had not recognized the pork in my beans.

But this lad was friendly, and overwhelmed with curiosity. He tried to talk to me. I was wearing a mustache and Vandyke beard and, possibly because of this, he asked if I were French. I told him that I was an American. He shrugged his shoulders; the word meant nothing to him. It was rather remarkable that he should try to guess my nationality at all. For, to most Afghans outside official circles, every foreigner is either an Englishman or a Russian, or else just a *kafir* (infidel), although in one district that I got into later “German” was synonymous with “foreigner.” Since Amanullah opened up the country to foreigners the Germans, more than any others, save possibly the Turks, have entered, and many Germans now reside in Kabul.

On the road west again we entered different country. A few miles past Jalalabad the road bears west along the Surkh-Ab (Red Water) River, a southwest branch of the Kabul, and then for twelve miles it passes through a narrow irrigated valley of green fields and trees, with running water in canals between the barren sandy hills that rise easily southward to the Safed Koh, and the equally barren pile of reckless rocky mountains that part the Surkh-Ab and Kabul rivers. Square adobe houses behind high mud walls, each with turreted corners and a watchtower, dot the valley. Unarmed men were working in the fields of growing corn and beans and rice; and melons were displayed for sale beside the road. The green was a great relief after the desert west of Loe Dakka, and I felt a wild desire to stop and remain awhile to learn what life is like in the quiet shade behind the village walls. Perhaps (I told myself) I would do that somewhere when winter came.

From the end of the irrigated valley the road bears farther south, and we began to climb to higher rocky country, though the following wind was still with us bearing such dust from the desert behind that the atmosphere was clouded, and the dirty snow peaks of the central Safed Koh were barely visible through the heavy sifting haze.

At Fatchabad the light Company car, which had been following us from Peshawar, came up; and we drove on together, climbing toward the evening sun to reach Nimla, the halfway post where travellers from Kabul to India spend the night.

Like Jalalabad, Nimla comes as a pleasant surprise when one is hot and weary from travel. From a distance the post looks like an empty *robot*, the large, high, mud-walled enclosures where caravans find protection for the night. All around is barren rugged desolation, and the ancient, weather-beaten walls seem just a part of it. But when the armed sentry opens the great gates one comes to a white bungalow in the ancient gardens of the once great Queen Nur Jahan, the Persian wife of Akbar's son; then the desert seems unreal, the world a pleasant place for man to dwell.

Great cypress trees and giant poplars border the drive and the footpaths through the gardens, and within the quadrangle of these

ancient trees are orchards of pomegranate and citrus and other fruits; and around the bungalow are sunken gardens and water terraces bordered by beds of geraniums, cockscombs, and petunias—now all in full rich bloom.

Many of the great trees in this old garden are said to date from Mongol times, and some of them, damaged by decay, were long ago filled with brick and mortar after the method now used by modern tree surgeons in the West.

The bungalow, cool and clean, was placed at our disposal, and we were called to a good meal designed to fit our Western tastes. But when the hot wind subsided, and the bright moon came out to cheer the peaceful evening, we moved our cots outside beneath the trees to sleep.

There, when everything was quiet save the gentle rustling of the cypress tops above the wall, and I was dozing half asleep and half awake, a dry twig snapped and I became alert again. My companion, the Company agent, was sleeping soundly in his cot beside me, but from the shadows of the garden an Afghan lad was cautiously approaching him. I watched tensely, without his knowing, overwhelmed again by the great fiction that proclaims all Afghans a bloodthirsty race of men. He came close and leaned over the cot, stood there for a long while, and then quietly withdrew into the shadows again and sat down. Not sure whether we were sleeping with our feet toward Mecca, or whether the fellow was only inquisitive, I fell asleep again. And then, although I seldom dream, I dreamed that two Afghans were holding me while a wild-eyed ghazi with rapt enthusiasm sliced my throat. I awoke with a start. The Afghan was gone. No doubt every Westerner who ever crossed the Afghan border has had "the wind up," either consciously or subconsciously, when he first entered the country.

We left Nimla at dawn with both cars, and drove in low gear to a minor pass a thousand feet higher than the highest point of Khyber; then we crossed the Surkh-Ab River at Surkh-Pul (Red Bridge), and climbed another higher one near Jagdalak, site of the fabulous Afghan ruby mines. Then again, after a slight descent, we mounted to nearly two miles above the sea over a third pass before we reached the canyon of the Khurd Kabul and turned

north down the narrow defile where the British army was destroyed in 1841.

All along the way, at every hairpin bend, and on every narrow ledge, we met strings of loaded camels, donkeys, and bullocks, with men, women, and children walking in groups beside their assorted beasts of burden, the small children and old people securely tied on top of the loads.

These were the living vanguard of the nomads moving down to India for the winter. But in my reverie I saw them only as camp followers of the ghost armies that will always haunt this trail: the Aryans, the Macedonians under Alexander the Great, the Afghans, the Mongols under Genghis Khan, the Afghans again in several waves, and lastly the British Tommies who marched up to stem the tide of conquests that since the dawn of time have poured down this trail to Hindustan. The hot, steep cliffs on either side fairly echo still the tread of marching men, the brittle clip of Mongol pony hoofs, the muffled pad of camels under arms, the sharp reports of scattered rifle fire, and the groans of wounded men. And my musings were not too fanciful. For the peoples that we passed have not changed much since the first organized bands of men decided to leave the lifeless mountains for the promised life in India. And like those earlier surges of humanity they are transients, for when spring comes again they all return.

"They have started early this year," Noor Said remarked. "That means an early winter."

Where the Khurd Kabul empties from the hills near Butkhak, at the eastern edge of the high, flat Kabul plain, we were stopped for the final inspection before entering the Capital. Then we drove the last few easy miles to Kabul, "the brooding city of suspicion."

The city of Kabul?

"Kabul town's by Kabul river"—at the foot of bare and rocky mountains that rise abruptly on the south and west and crowd the city down upon the plain that stretches northward from the stream. The old walled town, the section farthest up the valley where the river cuts a narrow bypass through the hills, is much

as Baber left it four hundred years ago—a huddle of narrow crooked streets and square flat-roofed adobe houses built together like a Pueblo Indian village on the lower mountain slopes. A part of the old wall still stands intact on the hill crests west of town; and beyond the wall, on the southwest side, the new lapis-inlaid Tomb of Baber (and his wives) rests in a charming spot where flowers bloom, and fresh spring water fills a public swimming bath. Farther down the valley, on the south bank of the stream, stands the dark arcade (or roofed bazaar) of Kabul, one of the busiest and most picturesque markets in Central Asia. On the north bank of the river are other streets of shops and serais, and on the flat plain north of these are the government buildings, the new legations and residences of the foreign political missions to Afghanistan, and the palace of the King. And on the northern outskirts are the barracks, the new radio station, and the flying field and hangars of the government's new Air Force.¹

Kabul is no longer a walled city; the northern section has expanded past the former city walls. But each street is walled, with barricaded entrances leading to the houses from the streets; and high thick walls separate each house and garden from its neighbor. Much of the northern section is comparatively new, for old Kabul has undergone great change in recent years, and now, more than any other part of the Kingdom, it is in a state of metamorphosis.

Change began under Abdur Rahman, who destroyed the famous old fortress Bala Hissar that formerly closed the southeast corner of the city wall, and replaced the British earthworks of 1842 with the fortified cantonment at Sherpur; and improved some of the city ways until wheeled vehicles could pass; and erected a new palace and durbar hall. He made many other improvements, including a factory for the manufacture of small arms and ammunition. That was all done fifty years ago.

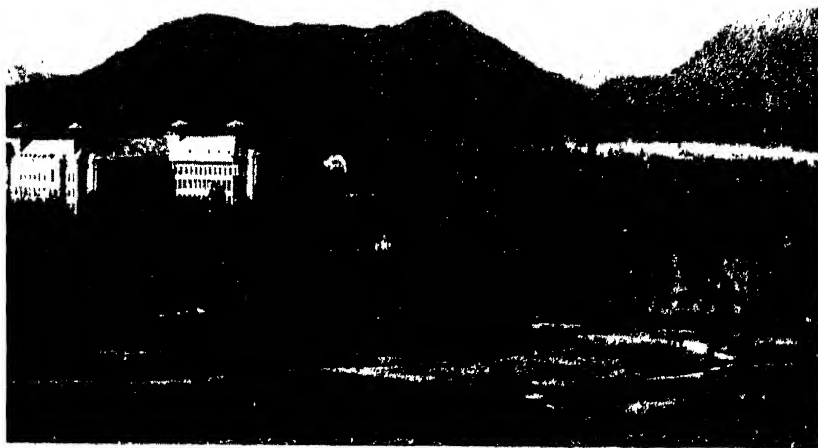
¹ The first airplane ever seen over Kabul was a British army bomber that came in 1919, shortly after Amanullah had started his little war against England. The few bombs then dropped did much to end the war quickly, and since then the Afghans have had a deep respect for aviation. They now (1938) have a few new military planes from England and Italy, and a former R.A.F. officer and several mechanics are engaged as instructors.



STREET SCENE IN KABUL

THE NEW BAZAAR IN KABUL





THE SENATE CHAMBERS THAT WERE NEVER OCCUPIED—KABUL

A VILLAGE NEAR THE CAPITAL



Habibulla later gave the city schools, and, by introducing modern "gadgets," meshed the old adobe quarters in a web of wires for private telephone and light, and brought in motorcars to vie with camels for the right of way in dusty lanes.

But the greatest change came under Amanullah recently. He made Kabul officially cosmopolitan, and, although the foreign flavor still is very faint indeed, nevertheless almost all of the foreigners in the country now live in Kabul, and they came only after Amanullah, ignoring precedent, invited them to come. Amanullah also built the royal suburb of Dar-es-Salam, or Da'la'man, a few miles west beyond the water gap where the river cuts the hills that bear the ancient city walls. Here now stand abandoned the new Senate Chamber and the Royal Palace that he was building when the revolution drove him out. He improved Paghman, the royal summer suburb nearly thirty miles west of Kabul at the foot of the rugged Paghman mountains. Both Da'la'man and Paghman include modern bungalows and are more like select neglected suburbs in Colorado than anything else in Afghanistan—and both are connected to Kabul by improved motor roads.

The beauty of Kabul?

A casual visitor might say there is no beauty in a city where one sees only the weather-beaten old mud walls that line the streets, and the restless, perspiring crowds of mountain men and merchants that in summer stir a heavy pall of dust, and in winter wade in snow or mud between the walls. But there is beauty in the cool secluded gardens behind the walls, where on a summer's day the scent of rose perfumes the heated air, and splashing fountains help to cool refreshing breezes. There is beauty in the terraced gardens on the western slope of hills that overlook the richly planted plain of Chardeh, stretching north and west to the base of the Paghman range; and in the scene that lies beyond the Paghmans to the snowcapped mountains of the Hindu Kush, cold and hard beneath an azure sky. For the Afghans are masters of landscape gardening, and their mountain scenery rivals that of Kashmir or the Rockies.

The origin of Kabul?

Like so much of the more intimate history of Afghanistan, it is lost and long forgotten. The name means "sheepfold," suggesting that it began as that and nothing more, when all these Central Asian tribes were nomadic shepherd warriors. But it has been a city of vast importance for countless ages, commanding all the passes that here debouch from the north through the Hindu Kush, and from the west and south through Herat and Kandahar. It was first made a capital under Baber in 1504; and in modern times it has been a capital continuously since the early nineteenth century.

The spirit of Kabul?

"There have I journeyed too—but I
Saw naught, said naught, and—did not die!"

It is a man's town with a woman's passion for brooding, ruthless, restless, jealous suspicion; where contagious intrigue poisons social intercourse, and malicious gossip flies from the old bazaar to the Kabul Court and finds its way to every foreign residence and back again then to the old bazaar; where espionage and counterespionage haunt each individual, and the unsuspecting new arrival soon learns to suspect even his closest colleague of deceit and wild duplicity.

This is a vicious game that Kabul plays, with everybody holding cards. The varied rival foreign leaders there, some with tasty "chestnuts in the fire," all play their hands to gain a point or to prevent another from doing so; and their nervous little followers sit in the game because it is fashionable, and in brash stage whispers manufacture silly tales, and feel important in the field of international affairs. And the Afghans, the masters of the game, hold all the trumps, and smile to see the younger players bid against one another, while they lay their own bets on the side.

Our entrance into Kabul was as quiet as the late September afternoon. There was no official reception and no fanfare, as there might have been ten years earlier, although there is no doubt that official Kabul—and probably most of the foreign legations too

—had followed every move that we had made after crossing Khyber Pass. We drove down dusty streets crowded with soldiers whose bearing and appearance seemed to call for sterner discipline; crowded with one-horse tongas clanging noisy bells; crowded with mounted men and camels and donkeys and men on foot, all equally expressionless to one still new to Afghan character. Three elephants—sad relics of Amanullah's hunting parties on the plains along the lower Kabul River—lumbered by our way. Then we came to a double gate in the high mud wall, and, in answer to my horn, a servant unbarred the gate and we drove into the back compound of the Company house prepared for us.

Many have learned patience in Kabul. One does not move there without the sanction of the government, and the Afghans are as versed as any Oriental court in the art of gracious stalling. Other foreign engineers, on missions similar to mine, have wasted months in Kabul before they got into the field; and some have never left the Capital at all. I remained there fifteen days, instead of five as I had planned, before I got away to Badakhshan. But my delay was not caused by the Afghans. They were as anxious as I to have my work begin. I was waiting for the Indian customs to release my kit, bonded material that was in transit only; and, when finally, impatient with delay, I did leave Kabul, much of it was still in bond in India. It was India, therefore, and not Afghanistan that held me back till winter drew a little nearer.

In the meantime, there was work for me in Kabul: study of the reports and files of the Afghan engineer in charge of mines, to guide my search for mines; clearing my kit through Afghan customs, and finding replacements for the part still held behind; arranging the field equipment so that it would pack with equal ease in a car, on a horse, or on my back, to suit our future mode of travel; and, finally, organizing a party of Afghans to go with me to Badakhshan. And, after the other members of our party arrived from India, our recreation followed naturally on evenings when we met with members of the little isolated foreign colony, and talked local politics, and sampled "Khyber Passouts," the stout cocktails they invented to ease their lonely exile.

I learned little from the Afghan engineer in charge of mines,

although he received me very cordially. In the first place, there is very little information in Kabul regarding the mineral resources of the Kingdom. In the second place, his chief assistant was a German engineer employed by the Afghan government—and Germany just then was making a strong bid for a concession to the mineral rights. So possibly some information was withheld. I never knew; but I observed later, in the provincial capitals where this influence was lacking, that information came more freely.¹

On September 27th, the first of my outfit arrived from India and entered *gumruk* (customs) in Kabul for inspection. The officials sent for my keys, and I returned at once with them to make the usual declarations and get my things all cleared. Declarations? They had never heard of such! They wanted to see what I had—and they did. I have never been more thoroughly inspected! The officials—there were several of them, each with several assistants—insisted on making a written record and description of every article that I possessed. I mean that literally! A chess game, for instance, was not listed as a chess game: the board was listed and described, and each piece and pawn was listed and described as a separate article of import. It was the same with everything. There was drafting equipment for map making: each drawing instrument, each pen nib, each thumbtack was counted and described and listed separately. The old examiners had such fun ransacking my belongings that graybeards knocked one another

¹ There was, at that time, much other evidence of Germany's forceful, peaceful penetration into Afghanistan. One met German salesmen in Kabul, and German highway engineers in the field. German steel was going into the new bridges on the highways. The Deutsche Lufthansa Company was the only commercial air line that landed on the Kabul Airport.

During these early autumn days of 1937, two of the large Lufthansa three-motor Junker planes made regular flights from Berlin to Kabul, ostensibly pioneering a commercial route from Germany to Japan. Shortly after we arrived in Kabul, one of these planes was reported lost and the other roared out over us each morning, reputedly in search of it. Later the lost plane returned with the story of a forced landing somewhere in China, the crew held prisoner by Chinese bandits. But later the story came out, on some authority, that this was all a ruse—that the searching plane had been on photographic missions.

During the following spring this company accepted a limited number of passengers on flights from Kabul to Berlin, with stops at Tcheran, Bagdad, Damascus, Rhodes, Athens, and Belgrade. It was by this means that I left Afghanistan.

During this time also, Italy and Japan were penetrating Afghanistan by similar methods, but they had not landed with the impact of the Germans.

down to be the first to open up a parcel and see its contents. I rescued most of my instruments and cameras the first day; but it took them another day to finish counting and playing with my other things, and by then their written record was voluminous. All this was necessary, they said, in case I ever wanted to take any of my things out of the country, when it would be necessary to prove that I had brought them in. My guns were released last, after I convinced them that I had no intention of starting a revolution.

My journey to the old bazaar was more refreshing. I went with one of our interpreters, Jamaledin, after he had tried to persuade me not to go. Foreigners didn't go there, he argued. They had things sent to their houses for inspection; or else they went to the new bazaar that caters more to their peculiar wants.

We drove, as far as we could drive, along narrow streets, through crowds totally unresponsive to our blaring horn. And then, since it is quite impossible to drive through the narrow congested streets of the bazaar, we abandoned the car and joined the milling crowd on foot, and jostled toward the entrance like New Yorkers toward a crowded subway train.

Kabul's city bazaar was rebuilt on the ruins of the famous old seventeenth century *Chihar Chata* which the British army destroyed in 1842. It is a labyrinth of dark, covered alleyways with open booths and shops along each side. Each group of merchants has a section. There are the cloth merchants, who now get most of their colored cotton prints from Japan, and who are just beginning to find it necessary to explain to their disappointed customers why their goods do not wear as well as previously when they bought English cloth from India. There are the cobblers whose best curly-pointed babouches come from Peshawar, where there is leather fit for cobbling. There are the metal smiths who work in copper, tin, gold, and silver, and who may have on display also a few rubies from Jagdalak, and lapis lazuli from Badakhshan. There are the hatters who embroider the fancy skullcaps around which the Afghan dandies wrap their turbans, although the best hatters (those who make the astrakhan or karakul caps that top all dignitaries in Afghanistan) are located in a separate

section of the city, as are most of the rug merchants and most of the fruit venders. And there are the venders of *poshtins* and sheep-skin robes—from which I thought I might make up another bedding roll, since my own was still in India.

The arcade we entered was dark after the glare of the open street. It was dusty from the thousands of shuffling feet, although water carriers were constantly sprinkling the way from filled goat-skins that they carried like bagpipes. One of them could not resist purposely splashing a little over me as he passed.

These water carriers are important folk. Their job is to keep down the dust, not only in the crowded bazaar, but also in the city streets. For, in addition to those who sprinkle the bazaar, there are others who come out about four o'clock each afternoon during dry weather, and, with wooden spades, shovel water on the streets from the ditches by the roadsides. Some time ago there was nearly an insurrection when the government ordered wagon sprinklers for Kabul. The water carriers (and "shovellers") complained that that would deprive them of their work, and they made such a fuss that the order for sprinklers was cancelled.

I was conspicuous as a foreigner in a cosmopolitan center where men from most of Central Asia mingled in the crowd. No doubt I was mistaken for an Englishman (from my dress and sun helmet, both of which I changed soon after). Certainly there was no giving way before me, as there is in an African village when a white man enters, nor any of the humble bowing one meets in Far Eastern bazaars, and none of the salaaming that greets a Westerner in India. The attitude of the crowd, or of those few who favored me with any attention at all, was mild disdain. One ragged fellow, whose manners were below par, spat at me. Good judgment warns one not to try to browbeat an Afghan here. They appear to be a sturdy lot of men, the survival of the fittest that the high, dry mountains and their violent life can breed. They are proud of bearing, savage and distinguished in appearance, and meet every man's eye on the level. There are no beggars—no paupers. They are refreshing, after the spinelessness of India.

The crowd included mostly men, dressed in their full, loose cotton pajamalike pantaloons, with long full-bodied shirts out-

side, and decorated vests. They were wearing the characteristic Central Asian babouches with the curly-pointed toes, and enormous turbans wound out in front to shade the eyes, with long, loose ends used to cover noses when the dust got thicker than they liked. Theirs is a most practical garb, and one that certainly permits more expression of individuality than our standardized costumes of the West. But I decided not to adopt it. A Japanese engineer tried that, not long ago, and the Afghans did not like it; they seemed to think that he was making fun of them.

There were few women in the bazaar, and most of these (except the Hazaras) were shrouded in their full, long, hooded purdahs with embroidered masks that invite young men to speculate on the beauty that the purdah hides. The beauty of their women is so great, the Afghans say, that no man could control his desire for them if they were ever seen unmasked. So they are forced to wear the purdah, and men must judge their beauty from glimpses of an ankle that they often manage to display—though to me it was easier to judge their character from the expression of their walk, and the tenderness with which they held their babies. Of course, according to the mullahs, these women had no business in the bazaar at all. They should have been at home where all females belong, instead of in the bazaar challenging men to estimate their ankles.

A few old men rode donkeys through the crowd; and a few camels mingled with the people.

We went first to the shoe bazaar, where I bought a fancy pair of embroidered curly-toes for a little man at home. Afghan merchants never urge a customer to buy; you may buy or not, as you please. Sometimes they are almost uncivil. But when I asked for baby shoes the usual reserve was broken, and the old cobbler almost smiled as he led me to an upper storeroom and selected a pair that he had not displayed before. For a child can warm an Afghan's heart. It is usual to see fathers attend their baby sons, sitting cross-legged in their shops explaining the world to them as the crowds go by, or interrupting a business deal to answer again some often repeated baby question.

"Of course," Jamaledin whispered in my ear as I was making

payment, "these slippers were made in Peshawar and have paid 25 per cent duty, and now he is doubling the price because you are a foreigner."

We went next to the section where *poshtins* were displayed, and I selected one. In the Kabul-Ghazni area sheepskin poshtins are the greatcoats worn in winter. They are made of soft dry-tanned pelts, like chamois, with the long straight-fibered wool left on. The smooth side is usually richly embroidered with red or yellow yarn, and worn outside (unless it rains, when the robe is reversed). The coat is usually made with sleeves so long that they serve as mittens—or else they are turned in, and the robe is worn as a long, ankle-length cape. These robes are warm and cozy in cold, dry weather, but they go to pieces if the skin gets wet. The Uzbeks, north of the Hindu Kush, use similar garments made of quilted cloth. The shepherds in the southwestern deserts make theirs of felt. The felts are the best, I learned later, after a winter in the field; they stop the biting winter wind, and shed the icy winter rain, and still hold warmth enough to sleep in when one is caught out without other shelter in the desert. But one cannot buy a felt in Kabul, nor a sheepskin in Farrah; interprovincial trade is not so much developed.

From the main bazaar we wandered out past stalls where luscious fruits were up for sale, and past tea shops where one can draw a cup of either black or green from a steaming Russian samovar, and, at will, top it off with a drag on the long reed stem of the native chillum, or water pipe, that is always charged and ready for a customer to use.

And then we came again to the entrance where, dazzled by the sun, we groped our way toward our car.

One comes away from a first visit to this ancient market place as from a world apart; it is a spot as yet untouched by Western influence. And may nothing ever change it! There is more real contentment on the faces that pass these busy crossroads of Afghanistan than in all the hurried crowds that pass by Piccadilly Circus or Times Square.

To help solve my packing problem, I sent for a local blacksmith to build a baggage rack on top of my car. An old man came

—a mild-mannered old man with bare feet and gray beard and gentle “Aryan” features. With him was a young Mongol from Hazarajat. Neither bore any resemblance to the swaggering ruffians whom we had passed on the mountain road from Khyber Pass, or those we had met again in the old Kabul bazaar, who for upward of a century now have written border history in hot blood on all the lonely trails from the Khyber region to Baluchistan. They brought a few crude tools, and improvised a forge in our back compound. They sat cross-legged at their work, and stopped five times each day to pray. The Hazara lad worked a double goatskin bellows and tended the fire and used the sledge. The rack was not a pretty sight when it was finished; but it would hold the baggage, the old smith declared when he came to get his pay.

The organization of my field party was not such a simple matter. In the first place, I found on arrival that the men engaged for field work thus far were not entirely acceptable to the Afghan government, except one Hazara cook—although our Company agent had been there some time for that purpose. Then on September 22nd, Kirk, whom I had left in India, arrived to organize his own party for petroleum exploration in Afghan Turkistan; and five days later our other oil geologist, scheduled for similar work, arrived to organize a third party.

Our Company’s agreement with the Afghan government stated clearly that only Afghan subjects might accompany us. The government wanted only its own men, or at least an interpreter of its own selection, with each party: we understood that—all foreigners in Afghanistan are under constant surveillance. The men who had been engaged before I arrived were Indians, or else Afghans who were British-Indian subjects; therefore, none of them were qualified to join our parties. His Excellency the Minister of Trade, who handled our affairs, objected, as he was bound to do. He informed us that we should not be allowed to take the Indians beyond Kabul, and he sent Afghan drivers and interpreters to replace them. But our Kabul agent, whom we then still trusted to manage such affairs, demurred where a man of better judgment would have quietly acquiesced. He sent the drivers

back without a trial and accepted the interpreters only under protest, complaining tactlessly that, in all Afghanistan, there was not a man could do this work as well as those whom he had brought from India.

Now the Afghans look upon themselves as the first among nations, and each Afghan considers himself as at least the equal of any other. They are proud of themselves, of their lineage, of their bold traditions, and of their general prowess. Naturally they resented such talk, especially from a young foreigner of questionable antecedents (from their point of view). That was an insult!

Before we realized it, our first official relations in Afghanistan accidentally headed in a dangerous direction. About this time the first consignment of my kit was released from *gumruk*, so I took what men were then officially approved and started for the field, feeling that it would be easier to reestablish amicable relations once we were in the provinces and actually at work.

CHAPTER II

OVER THE HINDU KUSH TO BADAKHSHAN

I LEFT Kabul on October 3rd and took the trail to Turkistan with three new men from Kabul in my party: One was the happy, temperamental gateman from our Kabul house, a boy named Russak, who had made himself useful as a general handy man. One was a dour Hazara lad, called Gorband, who enlisted as a cook. And the third, Mohammed Smala, was a clean-cut young student fresh from Habibulla College, who came as my interpreter. Russak and Gorband were eager to go; but Smala was pressed into my service, and I was pressed to take him. He, of course, was the most important member of our party since all my dealings with the people must be through him. I left without a driver, for Noor Said, as a British-Indian subject, was forbidden to travel beyond Kabul.

Our trail ran northwest, out past the swanky British Legation on the western outskirts of the city, over the low hills by the Gul Dara, and then northward to the town of Charikar. Beyond the first low hills it was an easy, level, dusty way through an open valley flanked by southern spurs of the Hindu Kush—the great irregular distant peaks of Koh-i-Stan (Land-of-Mountains), rising indistinctly through the early autumn haze to the eastward, and the compact Paghman range, standing in clear, bold relief like a wall on the west. The great expanse of the valley was brown and dry and barren, largely covered by outwash from the mountains, though numerous small streams brought fresh snow-water down the uneven Paghman slopes to the garden vineyards in the walled villages of the valley.

Some of the best grapes in the world come from villages here and in near-by valleys. They supply much of the fresh fruit in the

Kabul bazaar, and they furnish much of the annual crop of excellent raisins that Afghanistan produces—raisins which are desiccated in the perforated adobe drying houses that one sees in most of the villages along this road. Some of these villages have a unique method of preserving grapes fresh for their own use during winter. Choice bunches are incased in hollow, conical, mud cells where, in the high dry air, they keep without much loss of moisture and but little spoiling. It is noteworthy that grapes from these districts are not made into wine, although, if it were not for church restrictions, wine might become an important item of Afghanistan's much needed export trade. There is one exception to this: East of the mountains that separate Koh-i-Stan from old Kafir-i-Stan, the unorthodox Kafirs make wine for their own consumption.

This route carries all of the trade from the north to Kabul and to India, for all the main trails that cross the western Hindu Kush from Turkistan and Badakhshan, and from the old khanates of Khiv and Samarkand that lie beyond the Amu Daria, converge on Kabul through this valley. Hence it is a busy route. We found the road crowded with donkey and camel caravans, and also with Afghan motor lorries. Lorries here are comparatively recent. Much of the northern trade (like other business enterprise in Afghanistan) is monopolized by the Afghan National Bank, which in recent years has employed a regular lorry service from Kabul to Mezar-i-Sharif and Khanabad in the north, and to Kandahar and Herat in the south and west.

Near the north end of the valley, a few miles beyond Charikar, the trail branches three ways. One leads northeast across the Hindu Kush into eastern Badakhshan. Another leads northwest over the Hindu Kush, down into the Kunduz valley, and thence into western Badakhshan. The third leads westward up the Ghorband valley, around the west end of the main crest of the range, and then also down the Kunduz. All three branches lead over high passes, twelve to thirteen thousand feet above the sea, and are blocked by snow in winter. These are difficult, dangerous routes. Once upon a time, local legend goes, a party of Hindu traders, returning from Samarkand to India late in the season,

were trapped on one of these trails by early winter snow, and all were lost: hence the name of the great range—*Hindu Kush*, “Hindu Death.” Since then, winter storms on these trails have claimed many victims. The trail which swings west up the Ghorband valley is the only important one, being the only trail which will take wheeled vehicles.

From the wide-open valley of the Charikar, the entrance to the Ghorband valley is through a narrow gorge. The crooked road hangs precariously on a ledge blasted from the cliffs of solid rock; it is often blocked with awkward camels on the sharp turns where they cannot be seen ahead; and the clear blue water froths in continuous thunder below: all this comes so unexpectedly that it is terrifying at the start. But the beauty of the valley, and the surprise of finding small stone castles clinging to the canyon walls (like diminutive replicas of castles in mountainous parts of medieval Europe), soon absorb all attention and coax one deeper into the mountains.

Farther upstream the gorge widens out, and the valley harbors little plots of cultivated ground and is thick with people. It was harvest time when we passed through, and men, women, and children from the villages were in the fields threshing wheat, rice, and barley with ancient flails while nomadic shepherds and traders moved restlessly up and down, like birds circling before the fall migration.

In addition to the vineyards in the villages, and the sketchy general agriculture in the valley, this central part of Ghorband has partly developed coal deposits and the undeveloped iron deposits which are the main cornerstone of Afghanistan's hope of future mineral wealth, and also an ancient lead mine near the village of Farinjal, which in the past has furnished a local supply of bullets for Afghan's many wars. These deposits were accessible at any time, and since our goal was Badakhshan without delay, we did not stop.

Ghorband valley ends at Shebar Pass, where the road climbs to 9,800 feet and passes over the watershed between the Kabul River and the Kunduz, which flows northward to the Oxus. This is the low point, the southwest end, of the great Hindu Kush. We

started the final tortuous climb in the late afternoon, and it was evening when we reached the top and faced a glaring sunset somewhere over Iran behind the mountains. Then we coasted down into a narrow canyon, freshly cut through solid granite, and drove on in darkness between stupendous cliffs and a wild little stream.

During daylight we had made slow progress. The car and trailer were more heavily loaded than when I had left Peshawar; I had two extra passengers; and we were climbing the Hindu Kush instead of the low Khyber hills. Near the foot of Shebar our trailer, which was loaded with tinned food supplies, broke its back and had to be abandoned. Both of the other Company parties, and also a lorry, were to follow me from Kabul; so we left the baggage for them to bring. Unencumbered then, we moved easier in the night. Our immediate destination was the village of Koab-i-Mehzari, which contains the only government resthouse between Kabul and the north, and where our three parties had arranged to rendezvous and examine our first geological sections together before we parted.

The trail from Shebar Pass to Doab is not all easy downgrade. The first canyon becomes impassable lower down, and the trail leaves it and continues west into Bamian, crossing two other passes, each higher than Shebar, before it strikes another upper tributary of the Kunduz and then drops again northward into the main valley. So our night ride was long and arduous, and it was late when we finally reached Doab and induced the keeper of the resthouse to improvise a meal for us.

The little village of Doab lies across the valley near the junction of two streams, as the name indicates. On the road there is nothing save the new guesthouse (a large building of European design) and a few squalid huts where Afghan lorry drivers bunk at night, or sit cross-legged by a hissing samovar and drink green tea after their fatiguing drive from Mezar-i-Sharif or Khanabad. Several of their lorries were lined up by the road when we arrived, each heavily loaded with cotton from the north; and a great caravan of camels was resting by the lorries, their loads of gum resin of asafetida strewn all about till its fetid odor possessed the place. All were on the way to India—the cotton destined for India's

mills, the asafetida for use there as a condiment or medicine, or for reexport to Europe and America, where superstitious mothers hang the evil-smelling stuff around their babies' necks as a charm to keep all harm away. At dawn they were all gone; and the place was empty when Smala and I set out on hired horses for a geological reconnaissance of the hills across the river.

The next day, when all three parties had assembled in Doab, we continued our geological excursions together; and the following day, October 6th, we all left together for Khanabad, descending easily and hopefully through the mild autumn dawn, deeper into our adventure and deeper into those northern provinces where two and a half centuries ago Alexander the Great, wandering over these same trails, found the girl Roxana who became his favorite wife. Would there be some reward here for us, I wondered: oil at Sar-i-Pul on the western plains of Afghan Turkistan, or gold at Duang along the Oxus, or at least some pleasant associations with a branch of humanity whose way of life is so different from our own?

On the trail from Doab down to Khanabad are two landmarks. The first is the little village of Doshi, fifty-four miles down the valley, where a strong tributary stream joins the Kunduz from the east. A good trail leads up this tributary to coal deposits in the valley, and metal deposits are reported in the district. This trail continues east and joins the route from Charikar to eastern Badakhshan; and the high trail from Charikar to the Kunduz also follows the lower part of this valley. The second landmark is Pul-i-Khomri (Bridge of Khomri), thirty-two miles farther, where the main road to Turkistan branches off to Haibak (other coal deposits reported), and to Mezar-i-Sharif, the trading metropolis of Afghan Turkistan.

Between Doab and Doshi the valley is narrow and deep and crooked, though in places it widens enough to permit a little agriculture. There are three different peoples in the valley. First are the primitive farmers, who live in permanent mud villages along the way, herd a few head of mixed livestock, and tend small fields of rice, corn, and barley, like other villages all over Afghanistan.

As in the Ghorband valley, we found them busy in the fields, harvesting with hand sickles, flailing the grain on the ground, and forking the chaff in the wind. Then there are nomads who, unlike the nomad shepherds in other parts, live in temporary shelters (mostly cloth-topped tents with reed mat sides) and serve as transient farm labor or share croppers. And, of course, there are the gypsy merchants travelling on the road. Some of the more prosperous of these passed us with caravans of fifty or more camels. Others, not so rich, were using donkeys. Many were driving herds of sheep and cattle. Some were moving up the trail, others were going down—and there was indescribable confusion when occasionally they met in difficult places where the road was little more than a narrow ledge high above the swirling Kunduz water. Not all these people travel in bands, though that is customary. While we were breakfasting beside the road, shortly after sunrise, one lone vagabond with a single crippled camel and no goods came up and halted. Childlike, he told me all his troubles and then went on his way, his feeble camel limping and complaining loudly at each step. When first he stopped, I thought that he had come to ask a favor; but he only wanted sympathy. On all my travels in Afghanistan I never met a beggar.

Between Doshi and Pul-i-Khomri the valley is narrow, barren, and rocky, with high mountains close above the trail on either side. But north of Pul-i-Khomri the mountains give way to the low loess hills and the semidesert dust plains of the district of Baghlan.

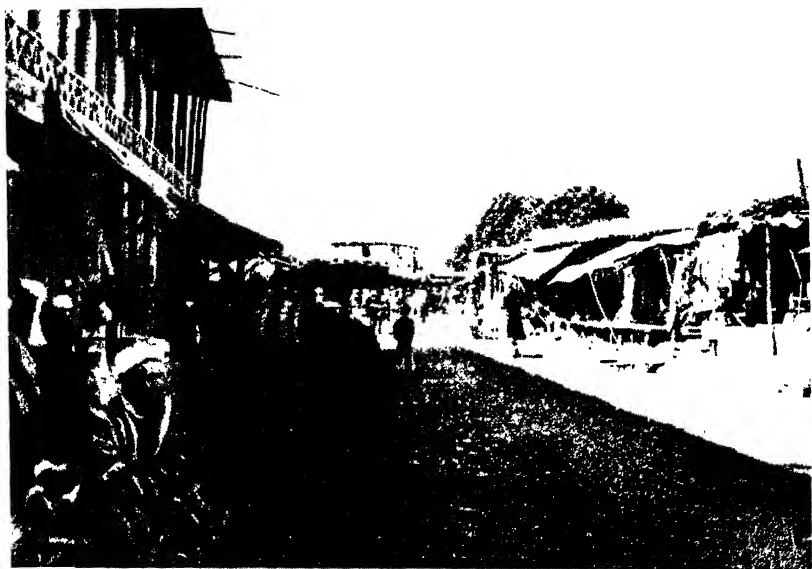
We entered Baghlan in the face of a strong north wind that brought a heavy sandstorm down upon us from the broad desert west of Khanabad. It was worse than the desert trip from Dakka to Jalalabad, but, in spite of the storm that lashed out of the north, farmers were still in the fields and by their villages, flailing wheat and forking it in the dirty wind as the villagers farther up the valley were winnowing rice. All Afghans are skilled in the art of irrigation, and the men of Baghlan have made the desert fertile with a network of small canals from the Kunduz River. This provides their grain. Beyond the irrigated tracts, at a level above the watered grain, fields of watermelons flourish in the



GORBAND VALLEY LOOKING EAST FROM SHEBAR PASS

PACK CAMELS COMING UP FROM TURKISTAN





STREET SCENES IN KHANABAD



sandy loess. We passed many acres of them. The Afghans boast that these melons are so tender that a camel trotting half a mile away will cause the ripe ones on the vines to crack. Accordingly, we must have destroyed fully half the crop when we passed, because near one of the biggest fields a camel from a passing caravan, frightened by our car, starting trotting down the road in front of us and refused to leave the track. We paced it at thirty miles per hour for several miles before we were able to pass.

In Badakhshan, by custom, two days each week are market days when men from the villages ride to their nearest bazaar to barter or to buy. It was market day when we passed through Baghlan, and at several places along the way farmers were assembling for trade. At one place in northern Baghlan the provincial governor is actually building a new city for this purpose. Here, as many as a thousand men must have assembled; and the road was crowded with others coming in or leaving. All were mounted, and we saw some of the finest horses of the land, most of them richly saddled and blanketed. In most parts of Afghanistan men do not "ride" their horses, but rather sit on top of bulky packs with their feet sticking straight out in front. These heavy bearded men, however, rode like the expert horsemen that they are, firmly seated in their high hard saddles, erect and supple as mounted Boers. Many of the horses were frightened by our car and tried to shy away. Then their riders deftly jumped them over the irrigation ditches by the road, as easily and gracefully as an antelope leaps a log. Some of the village farmers on foot were also frightened by the car, and even sour old Gorband laughed to see them run out of the road into the fields with their large baggy pants extending in the rear, inflated like balloons by the wind.

North of Baghlan the foothills die out into the sandy desert valley of the lower Kunduz. But in the last sharp-crested undulations the road to the north crosses many low passes which, for grade alone, are worse than the higher ones in the Hindu Kush. Here, late in the afternoon, in a barren stretch of country too dry for cultivation and too rough and high for irrigation, we stripped

our rear axle, while making a quick shift to pull out of a deep gulch. This was not a complete breakdown, for our cars were all four-wheel drive, and I drove on slowly with the front transmission alone pulling. But not far ahead, on the next steep grade, the front wheels alone could not pull us; they only spun in the loose gravel. We put on front chains and shifted the load forward, but that did no good. Meanwhile a tire went flat. Many Afghans wear hobnails, and the roads are full of them; when we inspected the tires, we found that they were full of the nails too. We changed the tire and waited for those behind to come up and tow us over the summit. I had been running about twenty miles ahead of the other cars, and it was an hour before they arrived. They had had trouble too—broken front springs and tires punctured by hobnails; but they still had four wheels pulling, and one of them towed us over the top to where we could go on under our own diminished power. There we waited while they returned for their uncoupled trailer. It was another hour before they reappeared and we went on together.

While I waited alone (Smala and the others having remained with the trailer), two ragged foot travellers approached the car and stopped to pass the time of day. The older was a dull individual who soon wandered on his way, but the younger was a bright-eyed youth, twice my own size, who took an intelligent interest in the things he saw. He was fascinated by the motorcar, and it was obvious that he had never been near one before. He felt all over the body and stroked the smooth finish. He polished the mirror and then admired himself in it. He was puzzled by the windshield glass and felt of it and looked through it first from one side and then the other. Apparently he had never before seen glass (which is not surprising, because all glass in Afghanistan is imported and only villages near the main trading cities possess it. He looked at the headlights and laughed when I turned them on. Then, when I offered no objection, he gained enough courage to inspect the interior of the car, the leather-covered seats and the panel, and the various instruments among my loose baggage. Becoming bolder, he then began examining me. He felt of my leather boots and jacket, and compared them to the sun-dried

sheepskin that his own feet were wrapped in, indicating with some satisfaction that at least they were of the same material. All the while he was trying hard to talk to me, and we finally came to some understanding on the basis of a few words and many signs. His interest was always keenest in the articles that came within the range of his experience. I wondered what he would think of my knife, a thing that he could fully appreciate. I was wearing a particularly fine English hunting knife, and, as if by accident, moved my coat to expose the hilt. It instantly caught his eye. I handed it to him. His reaction was that of a small boy who unexpectedly sees the thing that he most desires. He laughed again, and pretended to carve mutton with it, and indicated how much he would like to have it for his own, but he handed it back to me when I reached for it. I was beginning to feel friendly toward the chap and remembered another small pocketknife I seldom used that I might give to him. I showed it to him, but he misunderstood and thought that I was offering it for sale. From the deep folds of his loose robe he recovered two small copper coins and offered them in payment, his expression plainly indicating that they were all he had, and that he hardly expected the deal to go through. When I accepted them and then returned both the coins and the knife his eyes were bright again; and he shook my hand in gratitude—an unusual thing for an Afghan to do under any circumstances. After a while he indicated that the sun was nearly down, and that he had a long way still to go. He took leave and went on his way.

It was evening when we started on again together, driving now within the range of one another's headlights. And it was deep night when we entered the plain that spreads between the Kunduz River and Khanabad, where rice fields border the level road, and clusters of adobe huts indicate the approach to the city.

We entered Khanabad by a broad street between walls and huts of mud and poplar poles, where kerosene lanterns lit spots along the way and revealed groups of bearded men in the shadows. Our own lights showed other heads above the walls, all peering intently and silently at our motor caravan. Deeper in the city, at an intersection, a soldier on point duty, apparently knowing who we

were, directed us to a central municipal building that served as combined barracks and "hotel." It was there our journey ended.

Our arrival was anticipated, and soon there was much commotion. Men rushed about, preparing a place for us. Other bearded fellows unloaded our cars and carried our kit inside. The whole building was placed at our disposal. I was ushered into a long arched hallway and then into a room with a bed, a chair, a table, and a kerosene lamp. Soon a squad of soldiers marched in and deployed around our cars, and took up posts on guard beside our individual rooms. They were armed with old single-shot Enfield rifles (probably relics of the early English subsidy to Kabul) and large ball cartridges, many of which had been used and reloaded so often that the casings were split and battered. I was not sure whether we were honored guests or state prisoners, but after sixteen hours of heavy driving over camel trails I did not greatly care.

At the proper time next morning we sent our three interpreters to the provincial governor with our cards and our respects. They returned promptly with an invitation for us to meet him the following afternoon at two o'clock. We were flattered: usually an Afghan official of his rank will keep one waiting longer. He sent word also that he would like to see our cars, and so we spent the day repairing them.

At exactly two o'clock next day our party walked into the courtyard of the governor's house. Kirk's driver followed in his car.

We agreed to let Kirk be spokesman for the party. Kirk had red hair, an important asset in Afghanistan. All Afghan men who have made the pilgrimage to Mecca henna their beards to mark them as holy men, and naturally red-haired men in the Afghan villages are looked upon as especially favored by God. Kirk was also a natural diplomat, and we wished to employ our best talent in our conference with the governor.

It was Friday, which in Islam is the Sabbath, and therefore a holiday. A group of servants, idling in the courtyard, were expecting us and led us to the door. This was guarded by two soldiers with rifles, who presented arms as we approached. Then we

were ushered into a small entrance hall, through a large assembly hall richly carpeted and furnished with chairs and tables, and then into the governor's study. His Excellency Shar Mohammed Khan, the Governor of Kataghan and Badakhshan, was awaiting us at a small plain table. He remained seated while we stepped forward and bowed as the interpreters introduced us.

The governor, a heavy, strong-featured man past middle age, solemnly acknowledged the introductions and then sat back and surveyed us soberly—and a little shyly, as if nervous in our presence. I broke the ensuing silence by presenting my letter of introduction from the Minister of Trade in Kabul, which stated that I had come to examine the mineral deposits of Badakhshan. This gave us common ground to stand on, and he relaxed a little, as if recognizing his cue in some little play that we were rehearsing for the first time. Almost too eagerly he took up the problem, and before I quite realized it he had me going to Duang to see a reported gold occurrence by the Amu, and I was agreeing that that was the ideal plan. He went into details regarding where I might hire horses and who would go with me, all the while busily sketching a route map for me.

Finally I was able to drop a gentle hint that I had plans of my own, and that in execution of them I had already dispatched our lorry to Faizabad that very morning with all my field equipment. Cautiously, I suggested that, although his plan, of course, was much the best since Duang was so important, I had only been thinking that I might be able to see more of Badakhshan if I looked at the high country first and then followed the winter down to lower country. Duang is in the Amu valley; some of the other districts that he mentioned are over 15,000 feet above the sea. If I went to Duang first, I should not be able to reach the others at all before the next summer, because of the snow in the mountains.

At first he said that he would give me a tent and anything else that I needed to replace the things that I had sent to Faizabad. But then abruptly he discarded all his projected plans and sketched another route map for me to follow up the Kokcha River to the north flank of the Hindu Kush. That was exactly

where I had planned to go. And so when he again outlined detailed plans for the journey I eagerly accepted them.

In the meantime our Company's main interest, *oil*, had hardly been mentioned. Each of the other men had a letter similar to mine, stating that he had come to explore for oil. But gold appeals more to the popular fancy, and the governor was mainly interested in gold. He had actually seen the gold from Duang, and no one had ever shown him any oil. Finally Kirk did get around to his little good-will speech, and then the conversation became more general and more friendly.

Up to this point, our meeting had been stilted, like a formal conference between the Orient and the West. But now the governor assumed a new role; almost paternally (he was easily old enough to be our father), he asked us to go for a drive with him. He had a new Chevrolet car and a trained driver from Kabul, and he was sponsoring many improvements in his district. He was eager to show both to strangers, especially strangers such as we who were likely to appreciate his efforts more than his backward, reactionary subjects. He took us through the valley between Khanabad and Kunduz, an irrigated valley rich in cotton and wheat. A new town was under construction on the ruins of old Kunduz, and cotton gins and presses were being put in operation there. The governor told us proudly of his success in increasing the cotton production of the valley recently, and of new contracts to supply the Soviet and Japan with cotton (since our own cotton farmers in America had been plowing their crops under). He took us across the Kunduz River on a crude ferry that he had designed himself rather than wait for appropriations from Kabul for the bridge that was needed. On the way back to Khanabad he suddenly turned through a gate into a high-walled courtyard where servants were waiting with refreshments. There was a table on the lawn piled high with many different kinds of melons. He insisted that he cut them all himself, and that we each sample just a bit of every melon. They were delicious.

In Khanabad again the governor drove us to a municipal park, where an evening band concert was in progress. I have a strong liking for Eastern music, and I openly admired what I heard

there. When he noticed that I liked it, he ordered the band leader to bring his musicians and conduct a private concert at our rooms. Then he left us at our place, with another invitation to dine with him at seven.

The musicians, after time out for prayer, came to the barracks and began their serenade, all standing stiffly at attention by our entrance. It was evening, and with the evening came a sudden storm: first heavy wind and dust, then heavy clouds and rain and darkness. But the musicians' ranks held firm, and they continued to blare, with water streaming from their old brass horns, and cymbals and lightning and wet drums and thunder all wildly crashing and booming together.

I marvelled that the serenade continued through the storm.

"The governor has ordered them to play till you dismiss them," one of the interpreters replied.

I dismissed them promptly and they ran to shelter.

Before seven, a servant called for us. We returned with him and feasted with the governor till late at night—while the heavy rain continued and turned the dust outside to mud. Our meeting in the afternoon had been an official call. That in the evening was a friendly visit, and the governor was a genial host. The meal was conducted according to European custom as nearly as it could be by men unfamiliar with the complicated details of Western eating. Our host even joined with us in the use of tableware, although he was awkward with his fork and soon discarded it in favor of a spoon. Afghan custom employs neither plates nor knives nor forks nor spoons. Their use here was only a courteous gesture to please us.

The genuine friendliness one meets in Afghanistan on such occasions, and the thoughtful consideration accorded to foreign guests on legitimate business in the country, by far outweighs the reported cruelty of the Afghans to their enemies. Politically, as the governor of an important province, this man corresponded to the governor of one of our important states. Actually, his position was much higher because he did not depend on those he governed for reelection, but was appointed for an indefinite term by the national government. Would the Governor of New York

(or any other of our state governors) entertain three private Afghans who might come to him as we had come to Badakhshan? Would he arrange a private dinner party in their honor and then, to save them the embarrassment of using tables and tools to which they are unaccustomed, would he sit cross-legged on the floor with them and eat, as they do, by hand from one bowl placed on the floor for all?

That was our last supper together. Early the next morning (October 9th) I drove east alone with my own party, through mud and gloom, beneath low clouds that cloaked the mountains with fresh autumn snow, and drenched the valleys with cold autumn rain. We passed through partly cultivated country in the lower valley of the Talikhan near Khanabad, and through well tilled fields at Bagh-i-Mir where a strong tributary joins the valley from the north. This tributary supports a heavy population near its junction with the Talikhan. Most of the people here were Uzbeks: some, native to Kataghan; others, refugees from Soviet Uzbekistan, poor peasant farmers from across the Amu Daria who had but recently fled from Russia to Afghanistan where they have settled on land granted them by the Afghan government.

Some miles beyond the villages of Bagh-i-Mir we left the Talikhan, where it bears south, and started climbing low Lataband Pass in the barren uplands that divide this drainage from the Kishm. This brought us to a country where few motorcars had ever gone before, and where no other wheeled vehicles of any kind are ever used. Young men and old and sometimes women too, and always all the children, came to see our car at places where I stopped near villages. But they were frightened when they saw it moving on the road, and often when I approached travellers on the trail they fled into the fields and hid behind the rocks while their donkeys galloped away unattended.

"These men are wilder than their asses," Russak remarked ruefully after he had compared them for a while with an air of patient Kabul sophistication.

The clouds lifted as we rolled across the flat divide, and they parted later in the afternoon about the time we entered Kishm

valley at the village of Mashad. Then, for a brief spell before twilight, fresh moist sunlight flooded the rounded loess and level-bedded gravel hills beside the Kishm, and reflected from the new snow on the grand Khwaja Muhammed Mountains that rise behind the hills toward Wakhan. Before the month was out we were floundering in that snow on top of the Khwaja Muhammed Range, and reflecting that mountains are always most beautiful from some great distance.

A new road runs from Kishm to Faizabad. It follows down the Kishm valley from Mashad to the Kishm-Kokcha junction, and then it leads up the Kokcha valley. I believe that there had been but two cars (both Italian) over it ahead of my own lorry. It is not yet a good road. Fortunately it was night when we passed over most of it (darkness came while we were still in the narrow Kokcha valley some sixty miles from Faizabad), mercifully screening the hazards from our view. Otherwise I might have funk'd the job of driving. I certainly felt that way a month later when I returned by this same route on horseback and saw where I had driven in the night—over unsupported fill and around slippery unprotected curves that were banked in the wrong direction, and past narrow parts where a wheel misplaced six inches might have sent us tumbling down two hundred feet or more into the swirling Kokcha River. What an adventure it would be to bring in heavy mining gear this way! What a nightmare this road must be when under snow!

At a village where we stopped for information, shortly after dark, the chief insisted that we spend the night with him and not go on. If I had known the danger of the road ahead I might have done so. But in our ignorance we drove on in the night.

The last twenty miles were not so difficult. At the end we came unexpectedly to a turn, where the road descends to the river and crosses a high arched bridge of stone into the town of Faizabad.

Again I found that our arrival was anticipated. Before we had driven many yards down the first narrow, muddy street a soldier stepped out of the darkness and signalled for us to stop. He had been stationed there to guide us to the governor's house. A moment later he was joined by a servant of the governor with

a kerosene lantern, and the two men ran ahead of the car to lead the way. We needed a guide. The streets in Faizabad were not laid out to take wheeled traffic. They are a maze of narrow lanes between high mud walls, so crooked that in several places I had to stop the car and back and turn again to get around sharp bends. Finally, around the sharpest bend of all, we came upon the entrance to the governor's grounds, where the path leads up a short steep slope to a gateway in the wall. I shifted to low gear to make the grade—and the weak rear axle sheared another pin, and the car stopped on the slope with the motor roaring and the front wheels only spinning in the mud.

Servants took our kit and carried it to the rooms reserved for us; and they pushed our car up the slippery slope to better ground where I could drive into the yard. The commandant of the local garrison was there to greet us, and while all the servants followed with lanterns in a long, gay, chattering procession, he led us to my first native quarters in Afghanistan—a private billet in the rooms of the Honorable Said Abaas Khan, the Governor of Badakhshan. There he remained with us and made polite small talk until a servant came with tea. Then, with thoughtful hospitality, he left, for the night was advanced.

Dawn showed our strange surroundings, and the strange hill city that we had entered in the night.

Faizabad is the traditional capital and nerve center of Badakhshan, and the city's fortune has always been largely the fortune of the province. It is an assemblage of low huts of sun-dried adobe brick built on a mountain side, with high mud walls around the gardens of tall, slender, yellow-leaved poplars, and low bushy fruit trees, and (as we saw it) autumn flowers and vegetables; and with high mud walls along the narrow crooked streets that lead down to the fort and the barracks, to the open bazaar beside the Kokcha River, and to the strong stone bridge across the Kokcha. It is now the chief cantonment for north-eastern Afghanistan and the Pamir region; and it is also a peaceful, locally important, trading center. It has been all this since 1867, when Abdur Rahman annexed Badakhshan and stopped the raids of Uzbeks from old Kunduz, who but a short time before

had completely destroyed Faizabad and carried her people off to Turkistan. Before that, the city was head of an independent petty state, alternately mastered by local despots and by outside adventurers. When Marco Polo was here in the thirteenth century it was ruled by local kings who claimed direct descent from Alexander the Great.

The governor's grounds now cover possibly an acre at the upper edge of town, the upper half of this being taken up by low mud buildings, and the lower half by a garden of pretty petunias, and grapes, vegetables and fruit trees, including apricots, pears and apples. His "mansion" consists of long, low rooms joined together end to end around a square, with other similar rooms built across the middle of the square, leaving two completely enclosed oblong courtyards. The inner court, which has no outside entrance, houses the women and children. I never saw the inside of that. Council rooms, storerooms, a telephone room, and a suite of living rooms bound two sides of the outer court, with horse stalls at one end, and a solid wall (the back of the women's quarters) on the other side. From the outside edge of these rooms high walls extend around the garden. Walls and buildings all are made of puddled mud. There is no glass nor milled timber in any of the buildings. Barked poplar poles hold up the flat sloping roofs, and roughly hewn boards swung on wooden hinges cover windows that open out into the court. (Most Afghan houses have no windows at all.) When the weather is bad these are closed, and it is dark inside.

Smala and I were given the living rooms on the outside court, by far the best native quarters that I ever had in all Afghanistan, and possessing conveniences that one seldom meets with there. We had one long carpeted room with a small table and one chair (this was the governor's desk) and no other furnishings, and another smaller carpeted room with no furnishings, but with the only real wall fireplace that I ever saw in the country. Leading from this room was a small dark chamber, with a drain in the floor, that could be used as a bath; and leading from the bath was another small dark chamber that had a raised floor with a hole in it intended for a water closet. A few small pieces of dry

clay were placed by the hole for the occupant's convenience. Waste from both the bath and the closet passed through the floor and drained into the courtyard where men and horses waded and splashed about in it, except when everything was frozen. Water closets are as rare as Bibles in Afghanistan. The villagers use the fields in summer and the sunny side of their huts, or the flat roofs of their huts, in winter.

Early in the morning the governor's financial secretary—a jolly individual, conspicuous in golf stockings and plus fours—called to see us. Said Abaas Khan, the governor, was away on tour in the province, and his secretary was the acting governor in his absence. The financial secretary is always the second in command at a provincial post. He brought us fresh fruit and pistachio nuts (which grow wild on these northern mountain slopes), and in return he asked for quinine, a request which I could not grant because my medicine was with my bedding roll in India. (The only medicine that I then had with me was a small package of Stovarsol that I had obtained in Kabul for diarrhea.)

Faizabad is the end of the motor trail, the terminus beyond which all travel on this highroad through the mountains must go by pack animals or on foot.¹ So I planned to leave the car and continue on from here with horses. We requisitioned animals from the secretary, and he at once sent soldiers out to commandeer the number that we needed. He also detailed two soldiers to remain with me, and after that I had an escort that followed everywhere I went. In the bazaar, where we went in the afternoon to buy fresh food supplies, many of the idlers by the way fell in behind our escort to see the foreigner in Faizabad, until I led quite a procession through the muddy streets that pass the open shops. These shops displayed an abundance of dried mulberries

¹ A branch of the Khanabad-Faizabad motor road runs north from Bagh-i-Mir to Pul-i-Shema on the Kokcha, from whence it connects with Rustak on the one hand and with Chah-i-Ab on the other. Another branch follows the Talikhan River to the village of Talikhan, and to the salt mines of that locality. A government telephone line follows all these roads, and extends also along the Kokcha past Faizabad as far as Jurm. These are the only lines of communication and transportation in all of Badakhshan and eastern Kataghan, save footpaths and pack trails that will not take wheeled vehicles of any sort. We shall hear more of all these places later.

and dried apricots and fresh vegetables, Russian sugar, and large white lumps of fat from the tails of the native fat-tailed sheep. They had Russian boots, and local "deerskin" moccasins, as well as Badakhshan babouches; native plows said to have been made from iron mined locally; salt from the mines in Kataghan; and some imported goods from the larger bazaars at Khanabad and Mezar-i-Sharif.

The horses that we requested were waiting with their owners when we returned. We agreed upon four and one-half afghanies per day (about forty-five cents for horse and man, the owner to feed and care for himself and horse and return without pay. Then I sorted out the loads that we would take and those that we would leave in Faizabad. When my work was finished, the secretary came again with a fine white stallion that he offered me to ride. I accepted, and Smala and two soldiers took other mounts, and we had a brisk gallop by the river before the day was done. Fortunately I knew how to ride as well as they, for intuitively I felt that the loan of this fiery, white stallion was more than a temporary courtesy: it was a test of my fitness to lead Uzbek horsemen alone into the mountains. Apparently they were satisfied, for in the evening plans were concluded for our departure in the morning.¹

¹ Perhaps here, rather than later, I should explain something of the relative positions of Afghan governors, since I have already spoken so much of them, and especially since we had increasingly frequent dealings with these officials during the months that followed.

His Excellency Shar Mohammed Khan, who feted us in Khanabad, was chief executive of the combined provinces of Kataghan and Badakhshan and old Wakhan. In general terms (as decided by the combined Anglo-Russian agreement of 1873) this takes in all the territory in the great bend of the Amu Daria (Oxus River) north of the Hindu Kush and east of the meridian running south from the junction of the Kunduz River and the Amu. Kataghan takes in the part of this territory west of the Khwaja Muhammed Mountains and Kishm valley; Badakhshan takes in the country east of Kishm and the Khwaja Muhammeds and north of the lower Kokcha River, and it includes also Wakhan. Wakhan, like Badakhshan once an independent province, is the narrow corridor that extends between the high crest of the eastern Hindu Kush with India on the south, and the upper Amu Daria with Russia on the north, to the remote Sinkiang province of north-western China. The Honorable Said Abaas Khan, in whose house we now found ourselves, was chief executive of Badakhshan only, and therefore under Shar Mohammed. The many local *districts* within these *provinces* are under the authority of "local governors," or *hakims*, of varying rank, who are responsible directly to the "big governors." Khanabad is the capital of Kataghan (Kunduz was formerly

the capital), and also of the combined province. Faizabad, as has been stated, is the capital of Badakhshan.

Likewise, all other provinces in Afghanistan are administered by "big governors," appointed by and responsible to Kabul; and districts within the provinces are administered by hakims, responsible to the governors.

Perhaps I should also say something more of the main trails through Badakhshan before we leave, since in mountainous Afghanistan passable trails are all-important.

It is natural that Marco Polo reports having passed through Faizabad on his journey overland to China. The Kokcha River valley affords an open highroad from the lower Oxus valley, and hence from Turkistan, across Badakhshan by way of Faizabad and Zebak and Ishkashim on the upper Oxus, and thence through Wakhan and the Pamirs, to Kashgar and on to China. This is by the main or eastern branch of the upper Kokcha. The western branch of the Kokcha leads back over the Hindu Kush to Kabul by the trail, previously mentioned, that goes through Charikar. Both are important, but the latter only locally so, for the main trail to Kabul and on to India is the one by Shebar Pass that we have followed. The former is the main interior trail from Central Asia to China and is still an all-important route of travel, and must once have been an important route of trade. It is a particularly notable route geographically too, for the Kokcha River slices across the mighty meridional range, the Khwaja Muhammeds, that extends more than one hundred miles northward from the Hindu Kush, and determines the great northern bend of the Amu River. From the source of the eastern branch of the Kokcha to the Oxus valley is only about seven miles over a pass no higher than a thousand feet above the level of the streams, the Oxus here being under ten thousand feet in elevation. And the distance from the Pamirs to Turkistan by the Kokcha is much less than half that by the only alternate route—that is, the trail along the Oxus.

Although local bypaths follow all the valleys, there are no other important through trails in Badakhshan, since mountains everywhere are barriers.

CHAPTER III

TO THE MINES OF LEAD AND LAPIS LAZULI

THE MINES of Badakhshan are legendary. Arab geographers, during the tenth century, associated this mountain land with lapis lazuli and ruby. Three centuries later, Marco Polo brought back first-hand accounts of lazurite in Badakhshan. In recent times, since metals have been valued more highly than ornamental stones, reports have come of gold along the Kokcha and Oxus rivers, and of other mines in the mountains farther south. But no engineer in modern times had ever before set out to find these mines. That was my mission now. The governor at Khanabad had sketched a treasure map for me, and I set out from Faizabad to follow it.

On October 11th we loaded packs on our hired horses and started up the Kokcha River valley, riding back toward the Hindu Kush again, toward the medieval villages of the Tajiks, into that remote wild mountain land behind Kafiristan. A mounted soldier led the way, and Smala and my two boys and I were mounted; but the owners of the pack horses, from necessity, went on foot, each man at the head of his own horse. The soldier was assigned to us from the garrison in Faizabad, and from then on I was seldom without a military escort during my stay in Afghanistan.

We got under way quickly and with but little confusion, all men cooperating fully, though my needlessly heavy baggage was unfamiliar to the packers and fitted awkwardly on the native pack saddles. Our trail followed close by the river, past ledges of granite and gneiss that crowded us from side to side of the deep, swift stream, over flimsy bridges of poplar poles so frail that they trembled under the weight of a single horse.

It took us a day and a half to reach the village of Jurm, the

first hakim's post, some thirty-six miles upstream from Faizabad. Late in the afternoon of the first day, while I was riding alone some distance ahead of the party, an officer rode down the trail to meet me—a little, slender, dark-skinned officer with a Sam Browne belt fashioned from local leather,¹ a large gold earring dangling from his right ear, and a small tin police whistle that he blew repeatedly, like a small boy, for no apparent reason since no one took the slightest notice of it. He was ill at ease at meeting me alone, and rather self-consciously pronounced a little welcome speech, which was mostly wasted since I understood only a little of what he said. Later, when Smala joined us he repeated it again, half-heartedly, and then from Smala's translation I learned that he had been ordered to join us as "Officer of the Guard," and as "guide" on the perfectly plain trail to Jurm.

In the evening he halted us at Barack (formerly Khairabad), a settlement in the confluence area of the two main branches of the Kokcha River (and another tributary that comes in from the east). Here the valley widens out and there were apple orchards, and cultivated plots where opium poppies had been harvested. We were billeted in an old deserted house that resembled some ancient Greek palace more than the usual Afghan hut. Carpets were spread in the bare room for us to sleep on; but the sides were open, and cold wind and rain blew in on us after darkness came, and I had to warm my hands by a Primus before plotting my traverse notes.

The trail forks at Barack, a branch following up each of the two main valleys. The southeast branch leads by Zebak, through the Pamirs, and on to China; the southern branch, by Jurm and Anjuman, and then over the Hindu Kush to Charikar and Kabul. We were in the saddle again at dawn, on the southern trail, and by noon we entered Jurm.

Proudly now, before his own people, the little officer with the big gold earring led us into the village and up to the hakim's residence where, as at all our previous stopping places, the stage was set for our arrival. Servants opened the small gate in the high

¹ All Afghan leather, except that which is imported, is crude and poorly tanned, and generally of poor quality.



BRIDGES ON THE ROAD TO FAIZABAD





MAIN STREET IN FAIZABAD

mud wall and let our fourteen horses and men into the hakim's compound. Smala and I were taken to the council room which had been cleared for us. Other servants came with steaming Japanese tea, Russian sugar, and coarse unleavened Afghan bread. Then the hakim came and joined us, and we sat cross-legged and talked, while the men unsaddled the horses and picketed them outside in the courtyard.

The hakim had obviously been waiting for us, as he was elaborately dressed for the occasion in a long unused, wrinkled, black European "store" suit, with a vest that had once been white, a laboriously knotted black silk tie, and a large purple kerchief that drooped limply from the breast pocket of his coat—garb to which he was clearly unaccustomed, and which clashed strongly with the background of native turbans and flowing robes. A large green American fountain pen decoratively displayed in a vest pocket, thick eyeglasses, and three fully crowned gold teeth completed his ensemble, which, in general, was fully in keeping with his uneasy man-of-the-world affectations that somewhat dampened our conversation. I better understood his frame of mind, however, a little while later when I learned that he had been ordered by the governor at Khanabad to guide me from Jurm to the mines shown on the governor's sketch map. Then it was my turn to be ill at ease, for he was a flabby type of individual, unsuited for a rough mountain journey, and, in my yet undampened self-reliance, I felt that I should probably get on considerably better without him. We were both relieved shortly, however, when another message arrived from the governor saying that a certain local village chief would go with me in the hakim's place.

While we were still in the council room, the horsemen, disregarding entirely the sanctity of the teacups, interrupted us with a straightforward demand for their pay. This was as far as they had agreed to go, and they wanted to return to Faizabad. The hakim took the interruption as a matter of course and good-naturedly permitted himself to be shoved about as the men crowded into the little room while I counted out the silver. After they had taken their money and gone, I made a request for fresh horses. Lighthearted after his last message from the governor, the

hakim, acting quickly, had more than the required number in the courtyard before evening. This was possible partly because there were plenty of horses in the villages near Jurm; partly because the hakim and soldiers were under orders to help us. Without their cooperation it is next to impossible to operate in Afghanistan at all, as I learned after leaving Badakhshan.

Away from the few highways the question of transport is always a major problem in Afghanistan, and even by the time we had reached Jurm I began to foresee some of the difficulties that we were to encounter later. From Faizabad to Jurm, for instance, was as far as the first men we hired would go, although this trail was easy. What would be the attitude of the men farther back in the mountains where trails are difficult? Should I find any horses there at all, and, if so, could I hire them? Would there be a hakim in the more remote districts to give orders for me? What would be the attitude of these Mohammedan mountaineers during the month of Ramadan? Most of my work in Badakhshan would have to be done during Ramadan. Partly with these and other practical questions in mind, and partly for amusement during the remainder of the evening, I raised the question of buying our own horses.

At once the crowd in the courtyard took up the game with gusto. Several of the men slipped away and soon returned with two poor beasts that they offered to sell at ridiculously high prices, while their confederates in the crowd spoiled all chances of a sale by snickering and nudging their fellows. I mounted each animal in turn, rode out across the fields and back, and then ridiculed the mounts and the men and the prices asked for them, while all except the owners laughed with high good humor. Other mounts were brought then, each a little better than the one before, and we played at trading, over and over, until finally one of the older men brought in a really fine horse and offered it for sale at a fair price (five hundred Afghan rupees, or about fifty dollars). I lost my heart to it as soon as I was mounted and, after a long trial ride, would have bought the horse if Smala and the hakim had not urged me not to do so. Their argument was sound and is worth recording. They pointed out that when a horse is rented

in Afghanistan the owner goes along and furnishes his own food and forage and cares for the horse. In many places it is necessary to have one man for every horse in the pack train in order to traverse difficult trails safely. So, for every horse that I bought, I should have to hire an extra man to manage it and also have to rustle my own grain and forage each night; and when we returned I should have spent horses on my hands. When a rented horse is worn out, it is replaced by another rented horse. Smala and the hakim also said that the trail ahead was so difficult that one horse could not make the entire trip—a fact that I later found all too true.

Reluctantly I agreed with them, although there were other reasons for wanting to own a good horse that they could not fully appreciate. One was that I like to ride and like good horses. That alone was sufficient reason for desiring the horse that I had bargained for. Also (it was not altogether vanity), I wanted the prestige that goes to the man in Afghanistan who is well mounted. A man on a good horse receives more favor in the eyes of the villagers than one poorly mounted, and it is impossible to be well mounted on a hired horse. Men in Badakhshan value their good horses too highly to let them for hire. They have as keen an appreciation of horseflesh now as our people in the old West had before the days of hard roads and motorcars.

There was another practical reason why I needed one or two good horses of my own. From Faizabad I had started mapping our route in order more adequately to control my geological reconnaissance. I used the old cavalry method of mounted traversing by time and compass, sketching the country in a notebook as we rode along and plotting it on a single sheet each night to make a map—which called for some qualities in a horse that required a little training. An average horse takes about three days to get into good traversing habits; and as rented horses would have to be changed after about that interval they would be a contributing factor of error in my mapping. But the hakim and Smala prevailed, and darkness stopped our entertainment without a sale.

Jurm, like Barack and Faizabad (and almost every other village in Afghanistan), is situated where the valley is wide enough to

furnish cultivatable land at a level permitting river water to be used for irrigation. This combination, tillable land and available water, is the one essential to settlement in Afghanistan. Wherever there are soil and water, they are converted into food, and the quantity of available food alone determines the number of people that live in any community. There are only minor exceptions to this general rule even in the larger places where a certain amount of trade flourishes.

Jurm is the last village of any great importance in Badakhshan on this trail south from Faizabad. It is the end of the government telephone line into Badakhshan from Kabul via Khanabad.¹ Here is the last government official (civil) south of Faizabad. And here is the last bazaar, consisting of several little shops with a limited stock of local goods for trade. I remember this bazaar particularly, because it was here that Russak and Gorband each bought a pair of homespun woollen socks. Most Afghans have little thought for tomorrow, a complete disregard of the future, an unwillingness to think and plan ahead. When we left Kabul, the weather was still warm, and both the boys had only summer clothes with them. I warned them that we were going into the mountains and into winter, and that they should take warm things. But they only laughed. At Khanabad, where there was still a fair stock in the bazaar, I cautioned them again, and in the much smaller Faizabad bazaar I mentioned it again; but still they only laughed and bought nothing, though not for lack of funds. Finally, in Jurm I refused to take them farther unless they provided better for themselves. To satisfy my urging they each took an extra pair of socks, and made a great joke of it at my expense. Less than a fortnight later I had to share my own clothes with them to keep them from freezing on the mountain trail.

We were stirring early on October 13th; but with all new men and horses, it was late before we started. When we finally got lined out, I mounted and rode out of the courtyard; the pack train and soldier escort followed, and behind them came the old hakim, mounted on his horse like Don Quixote, complete with

¹ Present plans also contemplate extending the road from Faizabad to Jurm, and the preliminary survey was already getting under way in 1937.

English riding boots and spurs on upside down.¹ Most of the idle village men followed him on foot. But at the edge of the village they all stopped, saluted us, and then turned back. A short distance farther on, an old village chieftain—our new guide—was waiting beside the trail for us, and as we rode on up the valley we left behind the last slim vestiges of our Western culture: the telephone, and the hakim's riding boots, spurs, and foreign clothes.

The valley of the Kokcha River everywhere is narrow, but above Jurm the mountains close in tighter, confining the water in many places to a steep-walled gorge, and crowding the few poor mountain villages up on elevated terraces where side tributaries wash down a little soil and furnish water.

Slowly our pack train progressed up this valley, while I sketched in the geology along the sides. When the autumn sun began to sink, Smala sent one of the soldiers ahead to arrange our billet for the night. In the evening we came up with him again at a small village where he had ordered the chief to prepare a room for us.

Every one was astir when we arrived, and again horses and men assembled in a small courtyard behind high walls where, in the dark, cold shadow of the mountain that reared above us, the packs were off-loaded and strewn about and trampled on as village men and packers jostled one another in the little space, and the steam of perspiration from the horses filled the air.

From this confusion Smala and I were led into the chief's hut—a small, low structure, with a small, low door leading from the courtyard. Inside we found the single dark room emptied and swept clean for us. In the center of the mud floor was a fire hole, where some one kindled a little blaze that lost most of its heat, and some of its smoke through another hole in the low, flat roof above. Four soot-black poles around the fire hole supported the roof, and between these and the windowless walls the mud floor was raised six inches and carpeted. Here we settled ourselves.

I set to work at once, for it always took an hour or more each

¹ Native Afghan horsemen never use spurs; officers of the Afghan army wear them for dress.

evening to plot my traverse notes. But no sooner had I started than the room became crowded with men intently watching, smothering me with curiosity, until I had to push them back for room to work. Foremost among the crowd was the chief whose hut we occupied—a jolly young black-bearded chap, very full of himself and always talking, and apparently very flattered at being our host, as he should have been for all the attention that was being directed to his hut while we were there.

After my work was finished, and Smala, the chief, and I had eaten before the same audience—who now found my table manners as fascinating as my map making—some of their early shyness vanished, and our crowded quarters became more lively. Here there was no officialdom to temper their mood: my packers were from near villages; the soldiers were simple, local villagers; the chief was the only leader, and he was one of the boys; Smala and I were guests who had shown no disapproval of them. At first some of the bolder spirits made small jokes at one another's expense. Soon the gayety became general, and before long one of my packers (who, a short time before, had seemed exhausted from our long day's trek), felt inspired to entertain us single-handed. He started out with a song and a mild "hillbilly" dance, gradually becoming more animated as the delighted crowd made space for him. Soon he began to strip his outer garments, until he was bare to the waist and the crowd was hilarious, for Afghan men are extremely modest and a little bare flesh is very risqué. Then, having the crowd completely with him, he worked himself into a real frenzy of wild antics and shouting, selecting various members in the laughing circle of bearded men and impersonating each in turn to the great amusement of all the others.

This turn continued until the actor was exhausted. By then the packed room was so oppressive from poor ventilation that I found the door and stepped outside for fresher air. Outside, the darkness was now complete; as I flashed a torch to see my way, there, caught by the unexpected beam of light, were all the village women crowding in the open door of an adjoining hut, trying hard to hear what their men were doing, without themselves being seen by so many strangers. When I left the hut all who

could do so came out with me, and when I returned they followed me back. I had no privacy; for a foreigner in any Afghan village there is no privacy. Wherever I went, then or later, either a soldier or a guide always followed, and usually there were a dozen others also. Even my toilet could not be private.

In the hut the party was still in progress when I returned, and there were indications that it might last all night. I was tired and wanted rest, and the oppressive air had made me drowsy. So I started undressing. That was a signal that they understood, and the crowd dispersed.

The next day we had continued up the valley but a short distance when we came to a place where two strong tributaries enter the Kokcha from opposite sides. This afforded me the first good chance to measure a geological cross-section, since heretofore we had been traversing parallel to the strike of the rocks. So I called a halt, and we pitched our tents some distance from the nearest village. From my point of view, this was a desirable camp site. Long practice in Central Africa had taught me to camp as far from native villages as possible, for reasons of health. But the Afghans have just the opposite point of view (though I did not know it until much later). Their idea is to camp as near a village as possible for protection; or, preferably, not to camp at all, but to billet in a village—as we usually did. So they did not like it, as Smala indicated to me in a very roundabout manner in the evening. After the sudden darkness of the mountains, while I was working alone in my tent, he came and asked to sleep there with me. Of course I agreed; but the request seemed so unusual (since I had furnished him with a good tent of his own that was then pitched next to mine) that I questioned him.

“Are there robbers and bad men in America?” was the hesitating reply, in his simple, direct, schoolbook English.

I assured him that there were, and that if that was what was troubling him I had no objection to his bringing his bed into my tent. I was still very curious, however, to know whether his object was to protect me from some real or imagined harm, or to obtain the benefit of my protection; and so I waited to see whether he would sleep between me and the open end of the

tent, or whether he would sleep behind me. Long before I had finished my work he was deep in sleep—as far from the open tent flaps as possible.

The following morning we moved on up valley to the village of Gharmai, where another side tributary comes into the Kokcha from the west. There is a good trail in this side valley that is said to cross the Khwaja Muhammed Range westward into the district of Kishm by a pass that is not too difficult. And there are excellent rock exposures that offered a chance to complete my geological cross-section. So Smala and the guide and I rode west, while the pack train went on up the Kokcha to find shelter in another village, where we rejoined them in the evening.

Our way led beside a fresh little stream deep into the mountains, past small stone villages clustered under huge old English walnut trees, trees brilliant with autumn foliage and particularly attractive in a country so devoid of trees.

In one of these villages I rode suddenly around a wall and came unexpectedly upon a young woman standing unveiled by the way. For an instant she froze with astonishment; then she screamed and fled headlong through an open door. Later I heard her giggling with others inside the hut. This was the first good view I had had of an Afghan girl (other than the unveiled Hazara girls in Kabul), although I had then been in the country about two months. Wherever I had met them on the trail they had walked off to one side and squatted down with their backs to me and covered themselves with a shawl. In the villages they had remained in their own quarters, or behind walls—although curiosity often got the better of them and I had glimpses of eyes peeping over to watch me. In the villages where we had stopped, it was just the same, and I seldom even glimpsed a woman.

The women's position in Afghanistan intrigues most Westerners, and possibly shocks a few. In the home and in the society of these remote communities it is dictated by the Holy Koran and, for the most part, has not changed much since the time of the Prophet, over thirteen hundred years ago. As is always the case, however, some latitude is granted in interpreting the Holy

Book; and to a large extent a personal factor enters as the mullahs, like Christian priests, try to impose their own views regarding what a woman should and should not be allowed to do or wear or say or think. It also appears that custom varies considerably in different districts and among different tribes to fit local traditions and customs. For it must be remembered that all Afghanistan has not always belonged to Islam. The full story of family and domestic relations in Afghanistan, however, will probably never be well understood by foreigners because they are kept so strictly private. The following comments are generalizations in the broadest sense.

From our point of view there are two glaring differences between their order and our own. First, the harem, under the dictatorial command of the husband, is the basis of the family; secondly, within the harem the women appear (to us) to be virtual prisoners. Yet there is plenty of evidence that in many homes the women wield much influence and, as under any system, dominate the men.

Moslem law, or public opinion, permits a man to have four wives. He may take the first, if he wishes, when he is quite young. A boy hears that there is a beautiful girl at such and such a place, and he negotiates through his parents to have her. Or a mother, noting that her son is getting restless, may select a girl for him because she thinks he needs a girl. (This is said to be the general custom in Kabul.) She goes to the girl's mother to discuss the matter. If they reach an agreement, arrangements are made for the wedding. Theoretically, at least, the young folks never see each other before the ceremony, although they usually manage to accomplish this somehow. At the last minute, each has the right to refuse the other before the marriage ceremony is concluded if they are not satisfied; this takes courage, and in some districts if the boy refuses the girl he is expected to leave his village and not remain there to embarrass her. Girls commonly marry between sixteen and eighteen years of age. After the marriage the young wife has some voice in deciding whom her husband may take for his next wife, if he is not yet satisfied. A man may divorce a wife by simply repeating publicly, on three different occasions, the words, "I divorce thee." A woman may not divorce her hus-

band except for very special reasons—communicable disease, for example—although if she is ill treated she has recourse to the courts through her father or brothers. Divorce is frowned upon and is said to be very uncommon.

If a man dies his nearest male relative, normally his brother, inherits his women, although they may remarry some one else with the consent of their new master.

In parts where these customs prevail it is said that adultery is punished by death if the guilty person, either man or woman, is married. Offenders are bound in sacks and carried out into the fields and stoned to death by their outraged neighbors. If the guilty person is not married the punishment is lighter. But possibly this custom is not as severe as we are led to believe, for it appears that very good evidence, including several eyewitnesses, is necessary to convict one of adultery. Also, in some parts at least, and among the upper ranks, a man may keep as many concubines as he desires or can afford to feed, in addition to his wives.

In some of the provinces it is said that the other extreme of freedom is enjoyed by young folks who desire each other. There a man simply announces his desire for the girl he wants, whereupon he is free to sleep with her to his (and her) heart's content without further palaver, although it is expected of course that a marriage ceremony will follow in due course. Most Afghans are very reticent in discussing customs in old Kafiristan, where local custom apparently varies considerably from the best Moslem practices.

Few foreigners, except some women who have joined harems, know what goes on in them. In discussing them once with an Afghan I remarked that American men could not manage a harem if they tried, for if our men kept three or four girls under one roof the girls would be constantly fighting.

"Oh, ours fight too," he replied dryly. "One is always loved more than the others, and it always leads to jealousies."

Some Afghan men maintain several homes just to keep their wives apart. Then the ladies fight because they think the children are not treated equally.

It is said that there are English and other Western girls, notably

Australian, in the Afghan harems. But a visitor in the country has no means of seeing them or verifying their presence. Many Afghan men from the border regions travel, for work or adventure, or as members of the diplomatic or consular services. Many of them are strikingly handsome, and many of them can truthfully say that they are from important families in Afghanistan—that their father is governor of such-and-such a district, or an important merchant in Kabul or Kandahar. They needn't explain that the governor lives in a mud hovel and has four wives, and that when they return they will also live in a mud hovel and have several Afghan wives who eventually will be the favored ones. It is not hard to understand how attractive they must be to some Western girls, nor how tragic the girl's lot must be if she marries an Afghan and follows him to Afghanistan.

To an outsider it appears that the women are virtual prisoners in the home. They are not permitted any social intercourse except with the immediate members of their own and their husband's families. They are not permitted to be seen in public except in purdah, and even then they are frowned upon for straying beyond the shelter of their own walls.

The present tendency among the upper classes is to discourage polygamy. For instance, the present King has taken but one wife—but Amanullah's attempt to liberalize ideas towards women was the main cause of the revolution in 1929. The mullahs are mainly responsible for maintaining the old customs because they are written in the Koran. Yet this modern tendency is just beginning. During a discussion of the attitude of recent progressive leaders, an Afghan whom I knew well enough spoke somewhat as follows, regarding one of the late kings:

"Now he was a fairly decent fellow. But his father, ———, who was King before him, had five hundred wives and concubines in his *harem serai* (ladies' apartments), and yet he went regularly on hunting trips to Kafir-i-Stan and demanded a virgin from every village where he camped. And if he spent more than one night in the same place the villagers had to furnish him with a different virgin each night. He went somewhat to extremes, and some of the people finally objected."

It is pretty obvious that such practices have not entirely disappeared. And it is difficult for a foreigner to see how Afghans reconcile these practices with the strict laws regarding adultery, although it is plain that a subtle distinction is drawn between the letter and the spirit of the law, and that the elders wink at much that goes on. We may assume, therefore, that there are as many contradictions in Afghanistan as elsewhere. But for the most part, in such matters, a foreigner cannot analyze; he can only guess. In Afghanistan two subjects are too delicate for a foreigner to discuss freely. One is *religion*, and the other is *women*.

Each day's march during this time brought us into more rugged country and nearer the majestic snow-covered peaks that crowned the range on our left. And each day, as we advanced higher into the mountains, we could see winter advancing to meet us as the snow line descended to lower slopes after every passing squall. We found the villages more isolated and more primitive, and smaller, as few in these parts have more than an acre or two of soil to cultivate or any to waste for building purposes. Huts and walls, therefore, are made of unmortared stone. Mostly, however, the crops were the same as in the lower country, and here we still found many of the villagers threshing barley, driving oxen around over the sheaves of grain, and then sifting it in the wind with wooden pitchforks. Great flocks of partridges fed around these threshing plots—large, fat birds that reluctantly flew up the valleys when we disturbed their feeding, though they paid little attention to the villagers, who apparently never molested them. In other districts we saw villagers "drive" these birds into traps; but bird shooting for food or sport is reserved for the few men in the country (mostly officials from Kabul) who can afford the luxury of an imported shotgun.

On the 15th we billeted again in a small stone village close under the high snow peaks that rise above the river, where the chief, too poor to furnish carpets, spread hand-rubbed felt for us to sleep upon—felt that was warm and soft, but, as Smala complained, full of "insects."

Soon after dawn summoned us to mount and ride again, our full attention was occupied in following the trail—a narrow path that now crept cautiously by the river bank at the foot of tremendous talus piles, now wound recklessly high up the smooth, bare steep slopes of solid rock that rose above the river, where logs, wedged in rock crevices by the natives, supported a flimsy scaffolding of scree-covered poles for our horses to cross. On such trails one has little chance to map geology; indeed, so narrow was our valley, there was little geology to map save the very rock we walked on and the ledges that pressed over us from either side.

Our immediate objective now was the village of Lower Robat, the place on the governor's sketch map nearest to the first (or lowest) of the famous, ancient mines of lapis lazuli. In the cold, blue shadows of late evening, around a bold shoulder of the ever-increasing mountains, we found the cluster of miserably squalid low stone huts sprawling by a wind-swept threshing floor on the little promontory above the stream. Here, on the only level ground available, we pitched our tents, the huts being too poor and too crowded to offer billets.

The villagers received us cordially enough, each hut quivering with suppressed excitement at the sight of peaceful strangers camped beside their doors. But next morning they beheld in me something of which to be wary. Some distance below the village we had come upon good gravel bars in the river, and in the rocks along the banks I had noticed the first evidences of metallic mineralization that had come to me on our southward journey. I meant to examine both, and when morning came to our valley I requested men from the village to dig in the gravel, so that I could conveniently pan from bedrock after returning from an examination of the rock exposures.

Doubtless they would have refused flatly had not the soldiers with me urged them to accept the wages that I offered, and work a little in return. Under this pressure several men started digging near the village, while I ranged farther along the trail. But an hour later, when I sent Smala back to see their progress, the work had stopped, and all the men were in their huts again. While I was there they had humored me; but as soon as I was out of

sight they had quit. No one had ever before come there to dig holes in the gravel; and in their minds there was no reason now for them to dig, except to appease a foreigner with crazy notions.

This reluctance to do what has not been done before can be cited, almost, as a national trait, and is doubtless one of the main factors contributing to national backwardness. It is apparent not only in the resistance to major reforms, but also in the little things of daily life. For instance, at Lower Robat some of the rock that I wanted to examine lay across the river. When I asked the villagers where I could ford the stream they said that it could not be forded. When I asked them then how one got across they said, simply, that one did not cross. And when I asked how those on the other side came to be there they said that there was no one on the other side. My helpful guide, by way of explanation and warning, then interrupted to say that that was all very true, and that if I even tried to cross (as he knew, of course, I was planning), I should at once be swallowed by quicksand. During the conversation I was mounted on a little pony and, from my position above the stream, I could see through the clear water a solid gravel bottom under not more than four feet at the deepest point. At no place was there quicksand.

Being set, on seeing the rock on the opposite bank, I rode across the stream. Russak, more daring than the others, was the only one who would follow. The other men only shrugged their shoulders and turned away.

Another closely allied trait that I was beginning to recognize and struggling to overcome, was their tendency to misconstrue the truth—partly to avoid crossing rivers that should have quicksand in them; partly to mask ignorance and maintain an important front. One asks a guide, or a village chief, or even a local official, a question about something with which he is not familiar. He cannot say that he does not know—he would lose face if he admitted that. So he invents a good story and passes it on for the truth. Important questions that must be settled on the basis of local information alone, therefore, must be carefully checked and rechecked from various indirect approaches rather than from direct questions. Most of the tribesmen, and many of the lesser

officials, are remarkably unfamiliar with their country beyond the limits of their own little valley community. The old village chief who came with us as guide from Jurm was of this stamp. He kept us on the trail because it was physically impossible to get off the trail, but otherwise he misinformed me on so many points that I soon came to discount almost everything he said. Nevertheless he appeared to be a man of considerable local importance, well acquainted with the villages along the valley, many of which he held in subjugation through debt, so that wherever we met other people, on the trail or in the villages, they embraced him and kissed his hand and wailed prayers for his safety on the arduous journey that he had undertaken for my sake.

Through the early morning of the 18th we pressed on along the canyon wall toward the mine, unloading our packs and carrying them by hand over ledges too narrow for a loaded horse, loading again where the ledge was wider and firm enough to hold our concentrated weight. So we progressed slowly until near noon, while the late sun came out bright and dissolved the chill mists of night and made the narrow, rock-walled valley a reflecting oven that dizzied us with heat. Later we came to gentler slopes where the trail descended to the river and crossed by a bridge known as Pul-i-Madan, or "Bridge-of-the-Mine."

There, on the east side of the valley where a great boulder fan debouches from a side gulch, we found a small stone hut hidden amongst the rocks, and two soldiers stationed to guard the lapis mine, which since the time of Amanullah has not been operated.

Lest my motley crew of packers and excessive baggage unnecessarily arouse the guards, I sent them on ahead to find a camping place with forage for the night, while Smala and I remained behind. But my precaution was probably unnecessary, for we found the soldiers, particularly Nasir, the younger of the two, too long alone in their isolated post, hungry for company and eager to be agreeable. We lunched and smoked together beneath the scrub trees beside the hut, Smala deftly holding the conversation to lapis lazuli, our immediate interest, until Nasir volunteered to take us in the mine.

Together we climbed fourteen hundred feet above the river

by a footpath which zigzags up the valley wall to the portal of a large inclined adit that burrows into the mountain—the only entrance to the mine. This was barricaded by a thick stone wall, conveniently undermined by poachers so that we could crawl through without effort as they had done. Beyond this we came to large wooden doors, also barricaded and locked but as easily opened, leading directly into dark galleries filled with enormous blocks of rock that had fallen from the ancient roof.

We entered with torches, stepping cautiously lest we bring down other blocks upon us. After only a few steps the Afghans stopped, complaining that they were afraid to go farther. I laughed at them to bolster my own courage, remarking that I had always heard that Afghan soldiers were afraid of nothing. Silently then they came a few steps more, but again stopped and remained behind while I went on as far as it was possible to explore without ropes and ladders. There was ample reason for their caution, for all the ground was bad. From the main, cave-choked gallery steep winzes branched down to the limits of the irregular deposit, each, like the main gallery, filled with boulders that had dropped from the roof, and each a trap in the event of further caving.

From the discarded debris at the surface the nature of the deposit was apparent—rich blue lazurite with yellow pyrite replacing pure white marble; but inside the mine there was little for an engineer to base judgment on, since all the walls were thickly covered with a veneer of hard black carbon stain that had accumulated during times when the old miners had kept fires burning against them. The guards explained to me that this was for warmth; but they were not mining men and probably were mistaken. Although the mine is nearly nine thousand feet above the sea in a rigorous climate, it is not cold underground. It is more likely that the old miners, for want of explosives, used the ancient practice of building fires against the walls to heat the rock and then splashing on cold water to break it—a method still practiced occasionally in Afghanistan. No one knows the age of the mine, but the Arabs knew of it over a thousand years ago; and although it was intermittently worked up to about 1930 the openings that we saw were the oldest in the mine. The carbon-



CLIMBING DOWN FROM THE SULPHUR MINE



THRESHING WHEAT AT SCARZAR VILLAGE

stained surfaces, therefore, must be well over a thousand years old.

It was evening when we reached the surface again and started climbing down to our horses, hurrying to be after the pack train. But Nasir, with a fresh enthusiasm now for mineral exploration, delayed us with stories of other mines. He told of another lapis mine, and other deposits, farther up the valley; and he pointed across to a scar on the opposite mountain wall, barely visible through the purple haze that was fast gathering, where, he said, men had formerly extracted lead for bullets. This prospect was accessible only from Pul-i-Madan, and so we agreed to return in the morning and explore it together. Then, through the dull white night, Smala and I trailed our packers to the village of Parwara, where they had made camp and roasted a mutton for us.

Next morning, while we were saddling, a mounted visitor entered camp, modestly announcing himself as captain of a garrison farther up the valley. He bore us gifts of fresh bread and ripe apples, indicating that his visit was of some importance; so we left our horses and retired to my tent, where we sat cross-legged while Gorband served tea and we talked inconsequentially through the whole morning. About noon the captain came to the point: he said in effect, after considerable beating about the bush, that he had received instructions from the Kabul government to prevent me from entering the *military zone*. In Afghanistan the military zone includes all points within thirty kilometers of the border. I was bewildered. On leaving Faizabad my only definite objectives had been the mineral deposits marked on the governor's map. I had avoided committing myself to any other plan until I could see the lay of the land and judge the more promising mineralized areas. But I did not then know where these would be, nor where our trail might lead. Later, after studying my maps in the field, I had decided to traverse on up the Kokcha to Shahr-i-Munjan, near the source of the Kokcha, and then to swing northwest by a trail that leads to Zebak, and thence down the eastern branch of the Kokcha back to Barack and Faizabad. A part of this trail between Shahr-i-Munjan and Zebak is close to the crest of the Hindu Kush and therefore in the military zone on the northwest frontier of India. I had indicated

to Smala my intention to follow this route, but I had only done so a few days before the captain's visit. How in Heaven's name did Kabul find out about it in time to get a letter to the captain? Yet it was this very section of the trail that he specifically referred to. I asked to see his letter, thinking that he was only being officious by trying to enforce old standing instructions that did not apply to me. All foreigners in Afghanistan are automatically forbidden by law to enter the military zone without special permission. I had obtained this special permission before leaving Kabul. The captain refused to show me the letter on the ground that it contained other confidential information, but he assured me that it was a special letter that had just reached him and that it referred specifically to me by name. I was further amazed when I realized the fuller implications of this order. The gold deposits at Duang and elsewhere along the Amu Daria that I had especially come to Badakhshan to examine were *all* within the military zone. Shar Mohammed Khan had urged me to visit them; the government had been anxious that I report on them; there had never been the slightest hesitation in granting me permission to enter this forbidden zone either along the Indian or along the Russian border for the purpose. This order now would prevent me from seeing any of the deposits.

The captain's idea was that I should retrace my steps down the Kokcha valley. My idea differed from his considerably. Every day spent backtracking would be wasted. Every day spent following a new trail might lead to something new. Besides, I wanted to complete a closed traverse in order to correct my map. Yet the captain, in a very polite and friendly way, was quite emphatic in his refusal to permit me to follow the trail to Zebak; and there seemed to be no other way, unless I continued on over the mountains to Kabul, since we were bound in by mountains on both sides. With little hope, I asked permission to send my outfit through the forbidden area while I took a companion and crossed the mountains on foot, skirting the military zone and rejoining them again on the trail farther from the border. But the captain only laughed, saying that the idea was very good but quite impossible, because the mountains east of us could not be crossed

even on foot; and the cliffs above us so completely confirmed his point that I had no argument. At that we let the matter rest. There was still work to do in the Kokcha valley; perhaps when that was finished (I thought) some other solution would appear. Or perhaps, if the captain really understood the purpose of our work, he would find the solution for us. So we invited him to join the excursion to the lead mine.

Our soldier guides of the day before were waiting at Pul-i-Madan when we arrived and, while the captain remained down with the horses, Smala and I climbed with them, twenty-one hundred feet above the river to another hole in the mountain side. Unlike the lapis mine across the valley, it held comparatively shallow workings in the richer part of a strong vein which was well exposed both underground and on the surface. Although the deposit had apparently not been operated for some time, the workings were all fresh and recent, the last working face easily accessible, and still showing abundant galena embedded in a heavy gossan. Whoever had worked the deposit was obviously interested in lead only, for no attempt had been made to get below the surface oxidation and explore deeper for other metals. Among the Afghans present this fresh base prospect held none of the romantic interest (or economic importance) attached to the old lazurite mine across the valley.

As we climbed down to our horses, however, I was thinking less about the importance of this single deposit than about the captain's order that threatened to prevent us from locating other deposits, or exploring wider areas; and as we rode back to camp I talked earnestly to Smala while we were alone together. Smala, like most Afghans, was intensely patriotic, and I appealed now (paradoxically) to his patriotism. Under our arrangement whereby the Kabul government was promised copies of all my reports, it naturally stood to the benefit of the Kabul government to permit me to see as much as possible. I pointed this out to him, and I pointed out that we should fail entirely to gain any comprehensive idea of the mineral resources of Badakhshan if we were forced to retreat back down the Kokcha now. I pointed out that I could not even close my traverse, and that that would prevent

me from completing my map. I had hoped to prepare a map for the government. He would share the responsibility for our failure.

Perhaps Smala was somewhat impressed: I was not sure. In fact, I was not then sure that he himself had not played a part in whatever intrigue induced the order to be sent out from Kabul. Probably none at all, but in either case it could do no harm to make him a partner in my effort to finish an investigation that might benefit the country.

I saw no way to shake the captain's determination to prevent us from going to Zebak—he was only obeying orders that he had no authority to change; but I felt sure that there must be some other way, some obscure pass either to the east or to the west over the ranges that bound us in. Surely the local tribesmen knew of other trails than the one main trail that I had planned to follow. I recalled the trail over the Khwaja Muhammeds that we had found leading from the village of Gharmai to Kishm. I pointed this out to Smala and told him that it was his job now to find some one who would show us another trail that did not enter the military zone.

Next day I remained in camp, ostensibly to work on the map—but also to give Smala a chance to fraternize with the captain and the men at Parwara. I started to work early, and had only begun when Smala and the captain came to me. There was the light of victory in Smala's eyes. Apparently he had been busy the night before, arguing along the lines that I had indicated, when all the men in camp and from the village were assembled by the campfire. I put aside my work to listen. They had found a way! We would not go to Zebak, and we would not cross over the mountains—we would "ride around them" to the west. Only a half-day's ride beyond the point where we were camped the Anjuman valley joins the Kokcha. There the trail forks, the Zebak branch following up the Kokcha, and the Kabul trail following the valley of the Anjuman. The captain said that he had heard of a trail that ran north from the village of Anjuman (on the Kabul trail), over the mountains by a pass that we could cross with horses. He had never seen the trail. He knew no one who

had ever gone that way. But he said that sometimes during summer traders brought salt from the mines in Kataghan to sell to the mountain villagers, and that was the trail they came by. I was skeptical. My guide map (a 1:1,000,000 sheet by the India Survey), showed that part of Badakhshan as "Unexplored." But I was interested. I could gain as much by circling west through unexplored country as I could by following the well known trail to Zebak. Perhaps I could gain more. When the trail ahead is unknown one may encounter anything. I asked many questions, and I checked the answers against my judgment.

There was little chance that we could "ride around the mountains." The chances were, rather, that we should find them higher there where they branch off from the main axis of the Hindu Kush. The route by Zebak included no high passes, but this new route would certainly take us high. It would also take us halfway from Faizabad to Kabul before we reached the pass, and already the season was late. The icy peaks above us fairly screamed a warning that the season was late—that passes north of Anjuman would be blocked with snow before we reached there. Success would depend largely, therefore, on the weather, and on the chance that I could get men to follow me into high country in the face of winter snow. Granted that we were successful in crossing the mountains, this new plan meant travelling in a broad westward sweep and then back north almost to the Amu, altogether a ride of about five hundred miles. . . . I decided to ride on to Anjuman and make the final decision there.

With that problem temporarily shelved, another immediately arose. For several days the horsemen from Jurm, having already come farther from their homes than they wished, had been anxious to turn back. The guide had promised there would be fresh horses in Lower Robat, but there were none; so I had been forced to stall the men, quieting the unrest with extra rations and forage. Then, from Parwara I had sent the guide forward to find fresh horses in the villages ahead of us. Now, shortly after Smala and the captain left my tent one of the young horsemen from Jurm came to me and reported that the fresh horses had arrived, and that all the men from Jurm wanted to start back at once. Would

I please give the interpreter their wages? I called Smala. I was busy, and I had been expecting the new horses, so that I did not question the boy. We figured their time, and I counted out the silver and started to hand it over. But then I became suspicious and decided that I had better inspect the new horses before I let the others go. The horsemen were camped some distance from my tent, and I told the boy first to bring all the horses so that I could see them. He went but did not return. Later, I sent Russak to bring them, and soon all the men came; but there were no horses with them, and they were in violent argument, the horsemen united against Smala and Russak and Gorband.

"Hurrah for our side," I murmured as I continued to label rock samples, knowing that soon enough they would be at my tent with their troubles.

But before they reached me I saw Gorband grab a club and set to beating the young horseman who had come to me earlier for the money. The lad fled from camp, screaming, with Gorband close upon him. Then the wrangle moved my way again, and I put aside my work to hear their story. It proved that there were no new horses in camp at all. The lad from Jurm was homesick and had lied to me; or perhaps the others had sent him to trick me in order to get their money, intending to leave me stranded at Parwara. Russak had found them out when I sent him to bring the new horses, and he had brought them to me for the punishment which Gorband, unauthoritatively, had already so effectively administered. I put the silver away again and dismissed them; but later three fresh horses did arrive, and I paid off the three worst grumblers and sent them home.

Early the next morning we saddled to go in search of the other prospects up the valley: the second lazurite and other "mines" that the soldiers at Pul-i-Madan had told us about. Both the captain and Nazir were still with us in camp, and the latter agreed to come with us again as guide. But as we were riding out from camp he complained belatedly that he did not know exactly where the deposits were located, and that we should take another guide. Parwara was the only village near, so we rode there to enlist some of the villagers to go with us. We found the villagers

reluctant to come out of their huts and talk, and those who did all swore that they had never heard of any mines. We knew, of course, that they were lying, and I interpreted this to mean either that there was a difficult climb from the river up to the workings, or that they preferred us not to find mines too near Parwara. After a little cross-questioning, some of them finally admitted that they had heard there was an old mine somewhere near by; but they still maintained that the only man in the village who knew where it was located was a hopeless cripple who could not well go with us. That gave us what we wanted—and confessed the lie we had accused them of. We found the cripple and, much to the consternation of all the villagers, we loaded him on a horse; and the soldiers (our own from Faizabad and the guard from Pul-i-Madan) took another young lad from the village also as a hostage to insure the polite behavior of the first. Neither of these poor mountain fellows had ever been on a horse before; and both were doubly frightened in their unsteady perch, and in their matter-of-fact expectancy of rough treatment from us.

The mountains along the upper Kokcha are bare of any covering of either soil or vegetation, so that details of their surface can be seen from long distances; and we had not ridden far beyond Parwara when the cripple pointed to some old workings—evidently an old mine—high up under the cliffs across the river.

The stream here being dangerously swift and deep, we left half our horses behind with the cripple, a soldier, and the boy, and rode, two each, on the other horses; this gave the animals added weight with which to hold their footing better in the treacherous current.

A little scouting beyond the opposite bank soon revealed the faint trace of an old trail, by which we climbed on foot directly to the second lazurite mine: another adit, boring like a cliff swallow's nest into the base of the precipitous rimrock, ten thousand feet above the sea.

As in the first mine we had examined, the entrance was closed and barricaded. And after we had forced the entrance we found the mine in the same condition as the other, the workings as ancient and caved, the walls as black with carbon stain. Most of

our examination, therefore, was on the surface, where undisturbed lazurite veins were still exposed, and where there was some evidence of other mineralization in the cliffs above. But even here my attempt to range far from the trail was blocked by winter and the mountains. Fresh snow covered all the gentler slopes down to several hundred feet below the mine, and the steeper ones were frozen smooth and solid in glazed surfaces as slippery as an Eskimo's iced sled runners. The Afghans with me surrendered early, Smala and one other retreating down to the horses; Nasir, as guide honor-bound not to desert, clung to the rocks in the lee of a ledge to wait, while a vicious wind out of Russia swirled snow in little eddies behind him. Finally, late in the evening, wet with perspiration and near exhaustion from my risky climb above the mine, I rejoined him; and together we descended to the horses, forded the river in darkness, and returned to camp.

Next morning I awoke with a fever. We broke camp and started up the valley, but I was in no mood for either work or travel. Fortunately, the trail was easy except for a short distance above Parwara where an enormous mountain slide evidently brought down by earth tremors, which are frequent and often severe in the Hindu Kush, partly closed the valley and dammed the river so that a large lake had formed above. Above the lake, where the valley widens out at the junction of the Kokcha and the Anjuman, we turned up the Kabul trail; and a short distance beyond, where another smaller river flows down from the Hindu Kush to join the Anjuman, we came to the pleasant little village of Skarzar.

By this time I was too ill to travel farther, and we crossed the Anjuman and camped on the terraced land beside the village. Gorband brought me boiled goat's milk while the men pitched camp, and then I went to sleep inside the tent, wrapped in my woolly sheepskin poshtin and some borrowed felts from the village. During the next three days a severe throat infection developed and the fever mounted, until only during brief, infrequent periods of wakefulness was I in doubtful command either of my party or of myself; and the men dolefully sat about as if my affliction were their own.

With no medicine in my kit to combat the fever and recurring chills (thanks to the Indian customs) I directed Gorbant to feed me much hot tea, and kept Russak busy filling canvas sample bags with hot sand—shovelled from the river bars and heated in the gold pan over Gorbant's fire—and packing them around me for warmth. Then, on the fourth evening, the old chief of Skarzar, fearful lest I die in his village and bring some blame on him, or at least disrupt the easy routine of his detached existence, came to me and asked if I would take some medicine which he prescribed that I use as a gargle. I agreed, and he gave me some sprigs and said that Gorbant should brew a tea from them. I used them as he directed and, the next morning, was well on the road to recovery. Either the infection had run its course, or the prescribed medicine was very effective. (The sprigs resembled some of the dwarf mountain cedars that I had seen about; but the specimens that I saved were subsequently lost, and I never definitely identified them.)

For the next three days I remained near camp to regain strength enough to ride again. During this time both our soldiers from Faizabad and the old guide from Jurm asked to be relieved. Like the horsemen from Jurm, the soldiers were not good travelers; they were homesick and, what was worse, they had run short of opium, which some of the mountaineers in eastern Badakhshan use on the trail—as the Peruvians in the Andes use lime and coca leaves—to promote endurance. The guide had lost all enthusiasm for the journey when he heard of our plans to cross the mountains north of Anjuman. Skarzar was at the end of his world; Anjuman was beyond it; and the unknown valleys behind the mountains were too far away to contemplate. I agreed to their release. I paid the soldiers, as is customary, although they were receiving government compensation for military service. And, at their request, I gave them all letters of "honorable discharge." All this was a mistake. My idea at the time was that we should be better off without men who were dissatisfied. But by eliminating them I stripped our party of all official authority save that which Smala and I alone could later muster by the uncertain force of our authorita-

tive demeanor. Much later I learned that it was always better to have even an unhappy soldier (the government) with us than to be alone.

Two visitors came to our camp during this time, in addition to the many villagers who came regularly from curiosity just to look at me. One was a messenger from the hakim of Pas Kuran, a district covering the confluence of the Kokcha and the Anjuman (and the lower stretch of the trail to Zebak), who came to warn me again to stay out of the military zone. The other was an old man who called himself Khalid Khan, "Captain of the Guard (Retired)." The hakim's messenger, his mission soon accomplished, at once departed. But Khalid Khan remained longer, explaining that he was a prospector and that, since he had heard that we were looking for mines, he had come of his own free will to help us.

There remained but one prospect on Shar Mohammed's sketch map that we had not visited, a deposit which he had described as an undeveloped "sulphur mine." On the map it was shown near Skarzar, but we had been unable to locate any one in the village who would confess a knowledge of it. So now we asked Khalid Khan. Of course he had heard of it! He was the very man (he told us) who had discovered it and reported it to the governor. Only one other person knew its location, he said, and that person was our old friend Nasir, the young lapis guard at Pul-i-Madan, seemingly the only knowledgeable guide in the country.

The old man described the prospect as very high and difficult to reach, and since he himself was unfit for such work we sent again for Nasir to guide us. The following day he arrived, but like myself he had suffered a fever from our climb to the mines above Parwara, and without such good nursing as I had received he was not yet recovered, so that we delayed our departure to strengthen him.

During the wait, Russak and I spent a day exploring some red-bed deposits that outcrop in the rugged hills about Skarzar. This was the first time that I had ventured far from camp without a rifle, and it was the only time in Badakhshan that we encountered wild game other than game birds. Within a mile of the village

we surprised a fine herd of ibex in a deep gulch where they had come down to drink. For a moment they stood, as startled as we, not fifty yards away; then, since they are hunted by the mountain villagers, they left us in a shower of scree as they raced to their retreat among the snowy crags above.

Finally, on the 29th of October, we marched at dawn to find the "sulphur mine." Smala and Russak and Nasir were with me, and four men from Skarzar came along in case we needed extra hands. We rode easily up a side valley for half a day, and then leisurely bivouacked in a clump of bushes where the heavy highland snow came down to a feeble desert mountain "timber line." Smala, Nasir, and I, and the strongest of the Skarzar men, started climbing early the following morning. Russak, now the third victim of our Parwara sickness, remained ill in camp, rolled in a blanket by the fire, in care of the older Skarzar men.

The dawn was very cold, and within a short distance from camp we were breaking trail through heavy snow. In the beginning Nasir confidently led the way up a steep, dark, boulder-choked crevasse between high cliffs that rose sheer on either side, through which, by heartbreaking effort, we climbed till nearly noon; but then, at an elevation of about thirteen thousand feet (still not fully recovered from his illness), he collapsed, crying that he could go no farther. We helped him up a little higher to a patch of sun, gave him some hot, sweet tea from our Stanley bottle, and rested there awhile beside him where it was warm. But our position was untenable: the sun, which had drawn us up to warmth, had also thawed the cliffs and talus slopes above and so released a sporadic barrage of falling stones from the dizzy heights. After two large boulders crashed down together, barely missing our little party, we moved back again to the cold shelter of the frozen slopes, where we remained huddled together until our guide revived sufficiently to lead us on.

Several hundred feet higher we came upon a shallow surface pit, half filled with snow, which Nasir, now with unconvincing certainty, insisted was the "sulphur mine." There was nothing in it of interest save an old wooden spade which, we were told, Khalid Khan had left behind. Certainly there was not a mine.

In the same locality, however, while the three Afghans protested that we should leave the treacherous heights at once, I found some iron-stained veins that old Khalid Khan had not mentioned; and further search soon revealed still other veins, and cross veins, until by midafternoon I was quite enthusiastic about the prospect. Then—before I had covered more than a little of the promising ground—quite unexpectedly, from a sky which only a moment before had appeared entirely cloudless, there came a sudden smothering snow squall that enveloped us and in a few short minutes covered everything. And when, in the gathering cold and darkness, the wet snow brought fresh rock slides down about us blindly through the storm, the boys rebelled completely and we retreated. Two thousand feet lower we passed beneath the storm into a late October twilight; and in the night we came again to camp.

Early the following morning, with our sick men on horses, we returned to Skarzar where Khalid Khan was waiting for us. That evening Gorband prepared a feast of fowl and rice, and Khalid Khan, by invitation, joined us in my tent as honor guest. As I have already indicated, Khalid Khan was an unusual type among these Afghan villagers, the only man I met in the whole country who bore any resemblance to the old prospectors of our own West and Alaska, and as such, an eccentric whose interest in minerals was not shared by his own associates. The old man, therefore, was now delighted to find himself suddenly the center of so much interest; my modest reward for his help in directing us to the "sulphur mine" pleased him beyond all proportion to its worth; and so, intoxicated with the feeling of importance (and with opium, which he took regularly), he soon became effusively informative. Our talk, of course, was all of mines: He told us of several other prospects near Parwara that we had missed because they were unknown to the governor, and because the villagers had falsely pretended no knowledge of them. And he told us, also, of other prospects farther up the Kokcha than we had gone, and said that there were "many other mines" along the east tributaries that enter the valley of Robat—along the way that we had intended going before we were ordered away from the military zone. These

"mines," he said (referring apparently to undeveloped surface indications of mineralization), were not known to the government, but nevertheless were quite real. He offered to guide us to them, and furnished explicit directions for locating them if we returned later without him.

Under the ban imposed by Kabul's order for us to stay off the Zebak trail we were never able to verify Khalid Khan's optimistic accounts, but our acquaintance with the unusual old fellow did much, by contrast, to reveal the passive resistance of the average villagers to our quest for mines in their locality. Of course, Khalid Khan expected some reward from me for the information that he volunteered. But then, I had always offered to reward the other villagers too, and that never influenced them to offer information. In answer to our many inquiries in the many villages along the trail they *always* replied that they knew nothing of mines or minerals, even when it was perfectly obvious, as at Parwara, that they were lying. In many cases, of course, the villagers were simply ignorant folk who really did not know about anything beyond the limits of their village. And sometimes when they professed ignorance I believe that they were just trying to play smart by misleading strangers. But more often their attitude undoubtedly was much the same as that of old Paul Kruger's burghers toward the Uitlanders in the old Transvaal Republic: they did not want anything of value to be found near their villages; they did not want to be molested; they did not want strangers coming near their homes to work. For the most part, these people are a simple lot, deeply rooted in the little patch of shallow soil that feeds them, steadfast in their faith in the Holy Koran and the mullah, and suspicious not only of strangers but of all that is new and strange. They are poor peasant farmers and they want to remain poor peasant farmers. Again, in rare instances, they displayed a naïve reticence in volunteering information, as if their natural tendency to discourage intrusion into their valleys vied with the human desire to gain some little recognition from those who would intrude. For example, we were camped at Skarzar a week before we set out to find the "sulphur mine," and during this time I had established a very friendly relationship with the villagers. Having lived

much of my life among such "backcountry" people, I had much sympathy with them and through understanding was often able to gain their trust where Smala, who was distinctly "city-bred," and who too often appeared ashamed of his provincial countrymen, failed. It was this way at Skarzar although, while they responded fully to most of my advances, they remained deaf to my appeal for information regarding minerals. Specifically, I had made inquiry regarding the "sulphur mine" which I knew to be somewhere near, and as usual I had offered a reward for information. But every man, from the chief to the most lowly, denied knowledge of this or any other prospect. After Khalid Khan appeared, and we got Nasir to guide us, the Skarzar men who accompanied us came only as horsemen and packers. But, without my knowledge at the time, another Skarzar man followed us also, slept with the others in our camp, and started climbing ahead of us in the early morning. When we returned to camp in the night he had arrived ahead of us and had left a bag of pyrite with Rusak for me. Judging from the direction of his tracks in the snow, and the time that he was said to have been away, I could tell pretty well where he had gone—probably to the same veins that I had seen but a mile or so farther north along their strike. When we returned to the village I sent for the fellow and asked why all the mysterious behavior, since he had made no attempt to keep his actions secret from his fellows. He just said that he liked me, and that he wanted to show that he really did know something about mines!

Beneath all this surmise on my part regarding the motives of the Afghan tribesmen there is, as is usually the case, a good sound economic reason why they refuse to cooperate or aid an engineer in search of mines. Most of these people are loyal Afghans, and most of them are aware of their government's attempt to enhance the national wealth through mineral discoveries. But their deeper loyalty is to their own small isolated valley community, and to their traditional way of life. The mineral wealth of Afghanistan belongs to the state, and the few deposits that have been worked have always been worked by the state. It is doubtful whether much of the revenue so derived in the past has been used to bene-

fit the tribesmen; certainly the tribesmen back in the hills where the mines are located have received little benefit. Rather, they have been forced to contribute labor at a small wage. Mining law, as we know it, does not exist in the land. An Afghan subject, for instance, cannot go out and stake a claim on a discovery that he may make, and gain title to it and assume the risk of working it himself for profit. Whatever he finds goes to the government. Recently, the government has offered a bonus to anyone who reports a mineral discovery, but this is not enough. Now, if a mine is located near a village or in one of the larger valley communities, the people there all stand to lose more than they gain. Their ancient routine of life will be disrupted. Their community will be overrun by strangers—and they dislike strangers. They will be forced to work whether they want to work or not, at tasks with which they are unfamiliar; and they will gain nothing from all this that they have not already. Consequently, under this system, few discoveries are likely to be reported, except by men like Khalid Khan or Nasir—and the Khalid Khans and Nasirs are scarce. Legislation permitting a little more free enterprise, and the right of the individual to a greater share of the profit derived therefrom, might help a great deal to develop the country's natural resources to every one's advantage.

When our work at Skarzar was finished we obtained fresh men and horses from the village to take us on to Anjuman, and on the sunny morning of our departure their sons and brothers and fathers turned out in jocular mood to help us start and bid us Godspeed. Small boys, overzealous to help, got in the way, while old men bound our kit, and the adventurous, able-bodied voyagers who had joined us packed the loads with zest, like eager troops preparing for some easy sortie that would make them heroes. The spirit of every one was jovial. Even when one of the excited horses, frightened by its ill-fitting load, bolted over the cliff edge, broke its own neck by the fall and injured the two men who tried to stop it, they took the incident as an act of Allah that should not mar our good beginning.

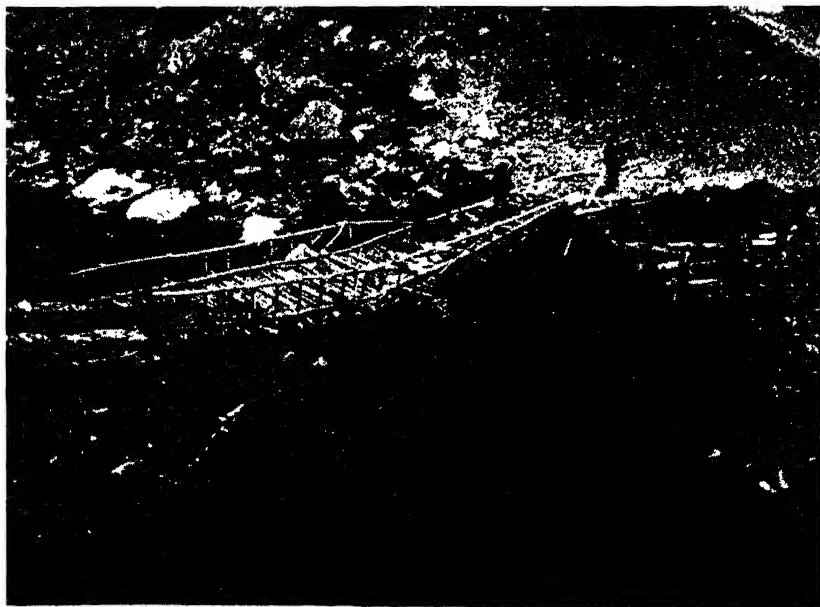
Later on the trail, however, when the sky darkened somewhat

with warning overcast, reminding us of our high position and our slow race to Anjuman against the winter, our new men sobered, and by late afternoon, with eyes on the weather, they appeared worried.

In the evening we camped by the river with two tents, while the Skarzar horsemen sought shelter in a near village that lay hidden among the rocks above the trail. While I was opening one of the panniers, Smala, who was helping me arrange our tent for the night, remarked that some of the contents might be damp, and from the corner of my eye I caught Gorband and Russak watching me slyly like naughty children with guilty consciences. Of course the pannier was full of water and all my personal kit inside was soaked. They told me then that, while I had been riding ahead, one of the horses had fallen during a river crossing and was carried down in deep water by its load, where it remained submerged until the men got ropes onto it and dragged the half-drowned animal ashore. The fellow who was responsible for this horse had reported nothing and had gone off with the others when we camped, entirely unconcerned about the damaged load. Later I sent for him, and together we hung the things to dry by a brush fire that we kept burning through the early night.

But our effort was wasted. In the dawn we found the fire out and the camp under four inches of soggy snow, the garments as wet as when they were first rescued from the river. Worse still, the tents were wet now too, and it was still snowing hard. Wet packs make heavy loads, and wet snow makes travel difficult and dangerous on mountain trails. Under these circumstances, now so changed from the morning before, the men asked to remain in camp, their previous ardor for the journey entirely gone.

To remain meant risking all chance of crossing the high pass north of Anjuman, still two days' march ahead of us. The first snow had fallen on our tents in the valley on October 27th, and subsequent local storms had brought much snow to all the higher elevations. Just one more good general storm now would block all trails till spring. And so I urged the men (they were in no mood now to be commanded) to march, and they listened unsympathetically to my persuasion till nearly noon before they moved. Finally we



BRIDGE OVER THE KOKCHA RIVER BETWEEN FAIZABAD AND JURM

THE DISTRICT OF JURM IN THE KOKCHA VALLEY





SMALA LEADS THE WAY THROUGH THE UPPER KOKCHA VALLEY

HIGH ON THE ROAD TO LOWER ROBAT



struck camp and slogged on gloomily through the slush, while the snow turned to cold rain and sleet, and rock slides (the thing they feared) crashed down the saturated mountain slopes across the trail.

As we approached the village of Anjuman, in late afternoon, I sent the column on ahead while I rode north alone into the mountains to scout the approaches to the pass and judge the higher trail. It was dusk when I came back across the cultivated terraces in the valley to the close cluster of crude stone hovels that make the village. A crowd of idle, inquisitive peasants about one of the huts indicated where my party was billeted. As I approached, the group quietly parted, opening a way to the entrance between double ranks of bearded faces—faces as expressionless as gas masks, showing neither friendliness nor hostility, and certainly none of the sunny hospitality of Skarzar. I threw the bridle reins, and a boy automatically took my steaming horse. The doorway into the thick-walled hut was a small oval hole, so that I had to unsling my rifle and stoop low to enter, like an Eskimo hunter entering his igloo. Inside, it was quite dark; but soon objects began to take form in the gloom: large, crudely carved wood pillars under heavy roughhewn rafters that supported the low, flat roof; raised mud shelves by the walls on either side, on one of which my wet tarpaulin was spread for a bed; another tunnellike passageway leading off to other dark, deserted rooms. By this passage I finally came to a larger room where a little daylight entered through a blackened smoke hole in the ceiling. Smala and Russak and Gorbant were huddled there miserably in their wet clothes, without a fire, the center of another group of unkempt villagers who glared at me without greeting as I entered.

Nothing was in order; no food prepared; no felt spread for us to sleep on. I leaned on my rifle and stared at the ugly scene and the men about me, feeling that I had been carried back five thousand years and planted among a people of the long dead past, and that, as such utter strangers, we were measuring each other. And so indeed we were!

Then, still alive to reality, I asked for food, the one thing at least that we should want in common. Gorbant, like the others,

seemed to have fallen into the evil mood that possessed them all. He said that he could not cook without a fire, nor have a fire without fuel—all the while making no attempt to help himself. I started the Primus for him, and cajoled some boys into bringing firewood. Then an old graybeard, apparently from sympathy with our silly pantomime, cleaned the cold fire hole in the center of the floor (carefully sifting out the clean wood ashes for lye which he would use later in making soap).

At last, with wet wood we got a smoky fire started that did not greatly cheer the scene; and then we started bargaining for meat. A child brought a chicken, and a man came with a skinny ram which he held gently but firmly in his arms as he thrust his beard insolently in my face and asked if that would suit me. When I said that it would if he had no better, he slowly bent the animal's head back and slit its throat with a knife that I had not seen, and held it and let it bleed to death in his arms without ever taking his eyes from mine.

The chicken was also butchered in the room with us, and the sheep was skinned and gutted there, and a youth walked off with the skin, remarking that it was not included in the price that we had bargained for. Gorbant cut up the still quivering fowl and dropped it in boiling oil, and we ate that and washed it down with hot tea while he cooked the sheep. Later I found that we could also buy crude brown sugar, like incompletely cooked sorghum, and we added that, and a supply of brown bread to our larder.

Three times during the remainder of the evening I sent Smala to arrange for the horsemen who would attempt to cross the pass with us when morning came. I sent him three times for emphasis, to remove all doubt regarding my firm intention of attempting the climb regardless of conditions. And each time he reported back that everything was ready. Some of the Skarzar men, he said, had volunteered to go on with us, and there were more men in Anjuman than we needed who were willing to go. His assurances did not ring true, however; and from the general attitude, not only of the villagers, but of our horsemen and of my own boys too, I smelled trouble brewing.

The villagers still were not hospitable.

That is because I have dismissed our soldiers, I concluded; this must be their natural reaction to strangers not escorted by troops.

The horsemen from Skarzar were still moody.

That is because they have looked too long at the mountains that I want to cross, I reflected, and because my loads are wet and heavy, and because it has been snowing most of the day.

My own boys were also sullen.

They are homesick, like all the others, I thought; the trail ahead leads to Anjuman Pass and then down to Charikar and Kabul and their home. They are getting tired of our rough life, and they know that the trail north that I want to follow is more hazardous than any we have come.

Or else, I soliloquized with most conviction, they are all funk-ing in the face of hardship.

I went to sleep and let the brew simmer.

CHAPTER IV

ACROSS THE KHWAJA MUHAMMED MOUNTAINS AND DOWN THE AB-I-PEW

LONG BEFORE daylight I awoke in medieval Anjuman, aroused Russak, and sent him out to awaken the men so that they might have time to feed their horses before we started. They would need a good morning feed if they were to take us over the crest of the Khwaja Muhammeds that day. And with mountain winter definitely all about us now, this was certainly our last chance to force the pass. I called Smala and Gorband, and we made our own breakfast, then filled our bottle with boiling tea, and our saddlebags with boiled mutton, brown bread, and sugar. Then I sent for the horsemen while we rolled our packs.

Three of the bearded men from Skarzar (my old friends) shuffled in and sat by. But they made no move to take the loads, and it was plain that they were sorry for their bargain to go with me. Others came in then and openly refused to go—men who, only the night before, had still agreed to go. It had been snowing again during the night, and they said that they were afraid of the trail.

I talked to them, directing my best arguments to the first three, who were less positive in their refusal. They wavered, and after a while agreed again to keep their promise, but reserved now the right to turn back, if it was too difficult, before they reached the summit. I praised their courage and asked them to stand apart from the crowd of other men who were afraid. That pleased them, and they stood by me proudly. It made the others appear cowards. I turned again to the crowd and asked if any more would volunteer to join us. Afghans are proud, and I was challenging their pride. Two other men crossed the room and stood by me, giving us a total of five men and five horses. All these fellows were men

I had become acquainted with in Skarzar. I needed five more horses, but none of the Anjuman men would volunteer. I sent for the chief of the village—who discourteously had not come to see us since we arrived—and asked if he had no other horsemen than the timid souls I saw who were afraid to go with the Skarzar men. He answered that there was a wedding up the valley, and that all of his best men and horses had gone there to celebrate. But Smala whispered in my ear that there was no wedding anywhere, that the chief had instructed his men to hold out for four times the rate of pay that I was offering.

Every one in the crowded hut then was looking at me. Very deliberately, like the melodramatic actor I was trying hard to be, I separated the packs that we had rolled ready to load, putting aside only the most necessary kit, enough for two horses. Then I turned again to the chief of Anjuman.

"Five men from Skarzar have agreed to go with me and take their horses," I said. "I have three men of my own. We are going to cross the Khwaja Muhammed Mountains by the pass that your men have already directed me to. I will take these two loads and keep the other three horses in reserve to ride if necessary. This means that I shall have to leave most of my kit with you, including all my heavy loads. I am now putting it in your charge. It is altogether impossible that I shall ever be able to return here to get these things myself. So, when your good men return from the wedding feast, will you please have them take my things to Kabul and leave them in care of the Foreign Office until I reach Kabul and claim them? If they are not there when I arrive, I shall let the Foreign Office handle the matter."

The chief's black beard bristled. There are a hundred and fifty mountain miles between Anjuman and Kabul. I turned to Smala then and asked him to have the five Skarzar men load and start at once. I was bluffing, of course, but it was a bluff that I could have carried out if it had been called, and the chief knew it. He decided not to call me, and after some face-saving palaver he furnished five fresh horses.

That did not settle everything. While the men were busy loading, I noticed that my own men had disappeared. Later I found the

three of them quarreling in the hut. Russak and Gorbant were sitting on their blanket rolls, and when I came in they declared that they were not going another step with me. Smala apparently had been urging them to come and thereby had drawn the full fury of their wrath upon himself. I tried to find their grievance but arrived at nothing definite. Russak said that he could no longer work with Smala, and Gorbant said that he had to do what Russak did. The real trouble just then was submerged by their animosity toward each other, and since Smala did all of the translating I was not sure that I got the full story.

They were easier to deal with than the village men, since they were members of my own party, serving under a definite agreement that we had made in Kabul. And they were young and impressionable. I knew that they would come as soon as they saw me ride out with the pack train. My main concern just then was to get the pack train moving. I urged the boys out into the open, and humored Russak (who was weeping bitterly), and told Smala to let the matter drop till we had crossed the pass. Outside, we found the horsemen still in an ugly mood and on the verge of another mutiny since they had been alone a few minutes to discuss the work ahead.

By then the sun was riding the cloudless sky—a perfect day to cross the mountains, possibly the last perfect day that we should have before winter came and went. And we were spoiling our chance of crossing by wasting time in Anjuman. I suspected that that was the deliberate plan of the men from Anjuman, who, of course, were thinking not only of the trip across the mountains, but also of their trip back, possibly after more snow had come. If they could just delay me long enough, I should never be able to get the outfit over the pass at all, and we should have to retreat down the Kokcha, or remain there in the valley until spring.

Only the three most loyal Skarzar men were loaded. To avoid another argument with the men, I mounted and called out to them and to Russak to follow me; and I instructed Smala and Gorbant to stay together at the end of the column and to start all of the other horses moving ahead of them as soon as they were ready. Then I rode out.

Probably no party ever started on a difficult journey with more dissension in the ranks or with lower morale. The Khwaja Muhammed Mountains were not the only barrier ahead of us. Sometimes it is easier to surmount a mountain range than the spirit of men who have no heart for the task ahead. Ordinarily, on such a trip it is best to keep the party together for mutual aid, but my strategy then was just the opposite. I was beginning to see the Afghans in a new light. Were they really the sturdy lot that I had taken them to be after my first visit to the old bazaar in Kabul? The sun was warm then, and I had looked upon well fed men with little work to do. Could the men here be of the same stock as those proud, arrogant fellows who had looked down their noses at me in the bazaar? These men had tried every ruse to avoid facing an unpleasant venture. They did not now appear in the guise of bold, resourceful mountaineers. I doubted whether they had the initiative to think and act individually. I was sure that if they marched together they would soon frighten one another with their exaggerated speculations regarding the dangers ahead; then probably they would stop and turn back at the foot of the pass as they had threatened. I knew that they would follow a leader, however; that one of them alone on the trail was not likely to stop and turn back if he could see some one else ahead of him going forward. I also knew that Smala was bound to follow me, and that he would not permit stragglers to desert if he could prevent them. And so I gambled on the chance that the whole party would follow Russak and me if we took the lead and kept moving.

I rode on ahead slowly with the first three pack horses, watching back through field glasses while Smala and the rest of the party got under way. Then I set a pace that kept us all within sight of one another but did not permit those behind to overtake me. And so we started up toward the pass.

There was no trail to follow, only a faint track that was lost under snow not far above the valley. The first part of the route was easy, and I began to think that the trail ahead might be easy too. But then we met a lone traveller with two horses coming down toward us who changed my fancy. He said that he had started early in the morning to cross the pass but the way near

the top was blocked by snow so deep that he could go no farther. At this Russak unquestioningly turned to follow the man down the trail; but I stopped him. Russak then suggested that we had better wait till Smala arrived and discuss the matter. I knew that would end my attempt to cross the Khwaja Muhammeds. If Smala and the horsemen arrived and heard the traveller's report they would prevail on me to turn back at once, and I could hardly refuse. I also realized that to permit the traveller to go on down the trail and meet them might lead to mutiny. Although we had difficulty understanding each other, I indicated to him that I was going on regardless of what he said about the trail, and I invited him to follow. Much to my surprise and relief, he turned and came with us. I knew then that either he was uncertain about the trail ahead, or he had been afraid to go on alone. His company lent us an extra man and two extra horses to help break trail and to use as needed, for neither of his horses was carrying a load.

Soon after we started again the gradient steepened rapidly, and, shortly, we came to the foot of a tremendous talus fan bordered by high mountains on either side. Up this the faint shadow of the trail switchbacked sharply and repeatedly to a vanishing point in a little notch high above on the snowy, serrate crest of the range. Climbing became increasingly difficult as we advanced; the depth of the snow—wet, soggy snow—increased; the loose slabs of rock beneath the snow slid down under us. There was perfect calm—not a stir in the thin, rare atmosphere, though fleecy clouds raced south above the mountaintops—and it was intensely hot, with the full heat and glare of the sun concentrated and reflected from the southern snow slopes. Fifty yards, in many places only fifty feet, was as far as we could climb without a halt. The horses, more than the men, were distressed by altitude, so that leading them was like dragging heavy sledges, and before long they were blinded by the snow glare and wandered helplessly into the wet drifts when we tried to drive them on ahead.

Russak and I gained the summit by midafternoon, battling for breath through the last few feet of hot snow below the rim, to the icy crest above where a piercing north wind swept the barren pass and froze our perspiration in a chilling cast of ice. Behind us,

only a hundred yards below, our travelling companion with his two horses was fighting hard to gain five forward steps a minute; and behind him, far below at the foot of the great talus fan, like little black ants on a sugar loaf, our packers were struggling upward, some of the men pushing their horses, others carrying the loads themselves and driving their unburdened animals on ahead.

By my aneroids, our elevation in the pass was 15,050 feet above the sea—5,000 feet *above* the village of Anjuman, several thousand feet *below* the peaks on either side of us. To the southward, behind our little packers down below, and far beyond the valley of the Anjuman, the great mass of the mighty Hindu Kush, with its mighty peaks and horns and cols, filled all the southern sky and dwarfed the range on which we stood, while northward, dropping abruptly from the pass through the deep, gray shadows of the only valley open to us, there stretched a rough wilderness of barren rock and frozen snowdrifts: a scene more desolate and empty than the Greenland icecap; more inhospitable than the papyrus swamps along the upper Congo; more rugged than the trails across the central Andes; a scene, a place, in which no one would choose to linger long.

Travel down the north slope, in the beginning, was as difficult as the climb up the south slope of the talus fan. We tried to ride, but the horses were blind, the snow was over their bellies, and they fell repeatedly. We tried to lead, but there was no trail under us, only boulders and scree beneath the snow, so that breaking trail was tedious, slow, and painful.

After an interminable period of floundering forward, we saw the pack train pass over the divide behind us, and I was then assured at last that those behind would not desert, since now it was harder for them to turn back than to continue forward. Soon, through the path that we had opened, Smala and the three strongest horsemen overtook us, and we stopped together for hot tea from our big thermos bottle, and brown bread, and some of the crude, energy-giving brown sugar that we had taken from Anjuman. Then, not daring to wait longer for the stragglers, lest night overtake us all in the upper valley where snowslides or another sudden storm might trap us, we went forward again to-

gether, while there was still light enough to pick our way and open a trail for those behind.

By late afternoon, when the bitter, transparent, solid cold of approaching night was settling thick about us, and our party was beginning to straggle again, and there was still only snow and ice and wind-swept rock spreading endlessly ahead, and no one of us knew what lay beyond, we came upon the first evidence that our valley had been traversed by man before: a crude, deserted, stone hut that some lone traveller probably had hastily built to shelter from a storm. And a little later, in the distance far below us where another valley joined the one that we were following, we saw the first signs of feeble vegetation and scrub bushes—promise of shelter and substance for a fire. This became our immediate goal and, after the brief twilight had quickly come and passed, we staggered on through darkness till we reached it.

Those of us first to arrive brushed away the snow and built a fire—a beacon for those behind on the trail. Gorbant, who arrived shortly with our provisions, heated the mutton and made a meal. Some of the other horsemen then struggled in without their loads, but several remained behind, lost in the snow and darkness.

As the night wore on, it clouded and began to snow again. Most of the men remained huddled in their poshtins by the fire; others tried to sleep, rolled on the ground in the one tent that had arrived without its poles, while fresh, dry snow softly settled on the canvas.

In the gray, snowy dawn we recovered the lost men and scattered baggage and then moved on down the valley, descending rapidly. By noon we were out of the snow; but lower the valley so narrowed that in most places our trail was in the icy water of the stream. Toward evening we came upon a few poor stone huts—deserted refuges of shepherds who, during summer, bring their sheep to these high pastures. In the best of these we took shelter from the cold snow wind, scraping aside the dry sheep dung and carpeting the place with our tents until we felt really snug and comfortable and very unclean. Then inefficient Gorbant, with the best of intentions, built a cooking fire with wet driftwood from the stream and smoked us all out into the cold

again. An hour before dawn, after we had returned for a few hours of restless sleep, he built a breakfast fire and suffocated us with smoke again, but this time we put dear Gorband out and threw his fire out after him. He would never, never have thought to dry his wood the night before.

The next day, November 5th, we moved forward and descended by evening to about 6,000 feet, where it was comparatively warm again. By noon we had passed out of the rocky gorge; and, soon after, we came upon the first inhabited huts in the valley below the pass. Several men and children came out as we approached. When they learned that we had come from across the mountains they brought us fresh bread, tea, and apples, and we halted awhile and lunched with them. These people called the stream we were following the Ab-i-Pew, and said that there was a larger settlement known as Wursach not far ahead of us.¹ They had no name for the pass over which we had come. Later we came to refer to it as Wursach Pass (Kotel-i-Wursach), and it is shown by this name on my map.

One of the men in this group was armed with an ancient, hand-made, muzzle-loading rifle that attracted my attention. It was possibly a .35 caliber, with a heavy iron rifled barrel that flared externally at the muzzle. The lands were wide, the riflings only grooves. The stock had been carved from a mulberry limb. There was a nipple and flashpan for black powder, but the only mechanism was a single light iron lever behind the breach which passed through the stock in such a way that the lower end protruded like a trigger and the upper end protruded where the hammer should have been. The hammer end was divided, and this fork held the loose end of a thin, twisted, wool rope that was tied around the grip. When the trigger end of the lever was pulled back, the hammer end of the lever with the rope was lowered into the flashpan. The rifleman carried powder, spherical cast-lead bullets, flint and steel, and a bit of bone-dry wool in pouches on his belt. When he wanted to fire he struck a pinch of the wool between the flint and steel so that the spark set it smol-

¹ Farther down, below the district of Farkhar, this same stream is known as the Talikhan.

dering. Then he transferred it to the end of the wool rope, rammed a load into the barrel, sprinkled a little powder in the nipple and flashpan, and lowered the glowing end of the rope into it. If he wished to be ready, but hold his fire, the rope would smolder for a long while like a piece of punk. I was so amused with the contraption that I asked for a demonstration. The be-whiskered young gent who owned the rifle readily agreed, and before I quite realized that he was getting ready he had flashed his flint and steel, fixed the glowing wool in place, and then, without hesitation, very neatly shot the head off a small bird that was hopping on the ground about thirty yards away. He assured me modestly that he could do that with every shot, and that he could also bring down a mountain goat with every shot if he could get within effective range. Elsewhere in Afghanistan at various times, I came upon practically every type of rifled gun, from muzzle loaders to modern magazine rifles.

We came to Wursach in the early afternoon and rode until evening through an open valley, past a continuous line of villages, and cultivated fields, and fruit trees all brilliantly colored with red and yellow autumn foliage. Many men from the villages came out to look at us as we passed, and in the evening, about the time we were searching for a place to camp, we met the son of a local chief who led us to the mosque to sleep. I was a bit surprised at that, since kafirs are not permitted to enter a mosque, but Smala confided to me that the people thought I was a foreign Mussulman, and the mosque afforded such a comfortable billet that he preferred not to enlighten them.

Here, on a wide veranda that surrounded the building, we set about spreading our beds with the rather unnecessary but friendly help of all the villagers, who, like those farther up the valley, tried eagerly to please us in every way. The chief's son, explaining that his father was away, and that it was his duty to extend his father's hospitality, brought velvet robes and felt pads to supplement our bedding; others took charge of our horses and duffel; and when there was nothing left to do they all congregated about us, sitting hunched cross-legged under their great robes, with in-

quisitive dark eyes staring intently over their great bushy beards at me and the map on which I was trying to work.

At sundown a mullah mounted the veranda steps and loudly called the village to prayer, affecting that very emotionally tragic voice that so many ministers of God seem to love so well; and then the quiet circle of bearded men about us rose and quietly filed inside the mosque for evening worship.

When the prayer was finished our young host came with fresh ripe apples and fresh bread and tea with Russian sugar. The month of Ramadan had begun, and we were invited to break fast with them. We lingered long over the tea, and I ate much of their delicious bread which alone is a sufficient meal.

This Afghan bread is unique and worthy of more than passing mention. Its value as a food is very high, and it tastes good—the two main prerequisites of any good food. Besides that, it keeps well, can be carried unwrapped in saddlebags without losing flavor, and is conveniently useful in other ways depending upon how it is baked. In most districts the custom is to bake large round loaves, up to twenty-six inches in diameter, and flat like a pancake. Then it resembles our rye tack, except that it is leathery rather than hard and brittle. Sometimes it is made very thin, like parchment, till one is tempted to cut it with scissors. In other districts the custom is to bake it considerably thicker so that a crust forms on the outside of the loaf. When baked moderately thin, as is generally the case, it has other uses in addition to that as food. For instance, when pilau is served, a single large round loaf is draped over the heap of rice to keep it hot; often during a meal a similar loaf serves as a dinner plate, the diner eating either the plate or the food on it or both as he desires; sometimes it is broken and folded to serve as a spoon, as when soup is taken—an improved variation of dunking. In general, besides being a good food, it well serves a people who employ no other eating utensils.

At midnight, when, after many interruptions, I had finished plotting the map and was preparing to sleep, they came again with a virtual feast of pilau and mutton stew and more bread and tea.

And again the village men surrounded us in a friendly circle and we ate like hungry men.

Again at two A.M., when I had only begun the fitful sleep of one too gorged with food, they awoke me for early morning bread and tea.

And finally, at dawn, after I had foolishly attempted sleep again, the mullah wailed for early morning prayer, and all the devout, groggy men again converged upon the mosque to worship—and then our day began.

This is their custom during Ramadan, and it was my penalty for posing as a Mussulman.

Ramadan is the Moslem month in which absolute fasting is required from dawn to sunset. It is the month in which the Holy Koran was revealed. It begins when the new moon is first actually seen, and it lasts until sight of the next new moon. It extends each day from the time when a white thread can be distinguished from a black one and continues until sunset. During this time it is *absolutely forbidden* that any man enjoy food, drink, or women, although—so considerate is the law of Islam—he may take his fill of all these things at night. The sick and those on a journey are excused, but are expected to fast an equivalent number of days at some other period. Most of the men with me during this month did not exercise their right to this exception. Ramadan is followed by three days of feasting and festival—the Lesser Festival. Fasting during Ramadan is reckoned as one of the five pillars, or absolute requirements, of Islam. The stated reason for the fast is “to make every one feel the pangs of hunger so that he may better understand the feelings of the needy.” The other four requirements include payment of legal alms, recital of the creed, pilgrimage to Mecca, and divine worship five times daily—at dawn, just after noon, before sunset, just after sunset, and when the day is closed. This program (of prayer) is conscientiously followed by most Afghans, most of the time, particularly during Ramadan. The prayer ritual—kneeling, bending, raising the arms, etc.—is an excellent form of calisthenics; and when it is considered that the devout pray five times a day, and that most Afghans are devout, it becomes apparent that prayer alone probably does much to keep

the nation in good physical condition. It has been suggested, even, that the Holy Prophet probably had this very thing in mind, that is, keeping the otherwise indolent people of his time and following in good fighting trim, when he prescribed it.

The following day we remained in Wursach while the horsemen rested, Russak and Gorband again tried vainly to dry the tents, and I worked on my maps. The villagers declared a public holiday, and from morning till evening—except during prayer time—the entire male population of the valley crowded around to watch me work. At first, still with some timidity, they only sat and quietly watched. But before long they nudged in closer and felt of my clothes and played with my instruments and chuckled over every little move I made, like city urchins on a picnic at the zoo. I was the first foreigner, they said, who had ever entered their valley, and one of the few strangers of any race who had ever ventured there. And so our visit was a notable occasion and they made the most of it.

I asked them if they had no work to do, considering that winter was at hand, and that there was hardly enough dry wood in the village then to afford a good cooking fire. They answered that their harvest was past, and there was no more work for them now till spring. From our conversation it appears that they spend most of the long winter months in idleness, or congregated in their cozy adobe huts repeating stories, particularly stories of the brave deeds of their fathers. Their women probably have no such easy time, for they have their crafts; in winter they make new felt, and spin and weave the homespun cloth that many of the mountaineers in these parts use for clothes.

Our second night in Wursach was like the first, all feasting and no sleeping; and after two restless nights and interrupted days I resolved to leave, and never again to billet in a village mosque. Otherwise I could very contentedly have remained there longer, for it was a beautiful valley settlement, with the colorful foliage of the orchards bright against the surrounding background of high snow peaks—beautiful and peaceful and hospitable after our journey through the wilderness of snow and rock on the pass from Anjuman.

Somewhat to my surprise, when the question of transport came up again, several of the horsemen from Anjuman valley asked to go on with me, preferring this to the more arduous journey back across the mountains. But the braver ones turned back to face the pass, although more snow had fallen on the heights and a storm was gathering when they left. These we replaced by fresh volunteers from Wursach.

The morning of our departure was dark and gloomy, with steady rain falling in the valley and heavy, dark clouds riding low on the mountain sides around us. Most Afghans refuse to travel in the rain for fear of rock slides; but when I ordered the outfit out there was little protest, and when I mounted and rode ahead they followed.

We soon passed beyond the pretty, secluded settlement, and entered again a narrow canyon which led us, all day, through an uninhabited, barren land of dark, low mountains of slate and schist.

Instead of clearing, as I had hoped, the rain kept steadily on, and as the day advanced a strong, cold, north wind sprang up and drove it into our faces, leaving us too breathless for complaint as we slogged forward bent against the storm.

During the dreary afternoon Russak and I pushed on ahead, leaving Smala and Gorband, by their own inclination, to follow with the slow-moving packers. After we had passed beyond sight of our party I noticed unusual rock formations in the hills above the trail, and we turned aside to study them. Later, after the packers had passed, we descended again to the valley and rode after them.

When we came up to the pack train again Smala was not with the others; he had gone ahead, they said, to ride with Russak and me. Clearly, he had not noticed the turning in our trail—although our horse tracks were plain in the soft, soaked earth—and now, from the conspicuous tracks which his own horse left, he was riding hard on a trackless trail to overtake us who were behind him. And so he continued to ride, widening the gap between us, while we followed the deep, flooded scars of his hoof



RUSSAK POSES ON THE TRAIL NEAR ANJUMAN



THE SUMMIT OF WURSACH PASS

WURSACH



prints. As the afternoon dragged on to a close, the storm increased in fury, and we were pressed to look for shelter.

The rain-drenched dusk was fading when our leading packer—like a hunted animal instinctively sensing a safe retreat—recognized a faint, storm-washed trail leading up a small tributary, and turned to follow it. This led us, not far back from the main valley, to a picturesque little stone village, sheltered on two sides by high rock cliffs and surrounded by high stone walls. The place appeared deserted; no dogs barked; no one came out to meet us; and again Russak, unconscious of my recent resolution, led us directly to the village mosque. But before we were off-loaded an old mullah came hobbling out alone and raised a furious protest. To him, unlike the Wursach men, the presence of uncouth strangers in the mosque was sacrilege, and he would have none of it. His violent protest and frail body amused the men, who paid no heed whatever to his ranting; and Russak, thinking to avoid the work of pitching heavy tents, suggested that I tell the mullah to go to hell (rather strong words from a youngster under the circumstances). But I rather agreed with the mullah, although for different reasons; and disregarding Russak's free advice we camped near by under some ancient, gnarled oaks where the wind was quiet, and the rain fell gently, and there was peace and shelter from the storm. Strangely, there was peace from the village, too; the old mullah, still mumbling to himself, left us when we turned away from the mosque; the usual crowd of idle, inquisitive men failed to make their appearance; and later, when we went to the huts seeking information about the trail ahead, we found only a few old women, who were apparently alone.

During the night the storm passed. The new day came fresh with a clear blue sky, and a bright, strong sun that flooded the rain-soaked valley with invigorating warmth, and flamed from the slopes above the trail, covered with fresh snow. How this snow must have piled up in the Khwaja Muhammeds behind us! We were here about 10,000 feet below the summit of Wursach Pass, and the storm had been heavy throughout the region south of us. The horsemen, returning to Anjuman, could not have arrived before the storm; nor was it likely that they could cross the pass

after the storm. It was impossible now for us to know what had become of them—and not to feel some concern, and to understand better their reluctance to join our race against winter with such a narrow safety margin!

About noon, when I was again riding alone some distance ahead of the outfit, I met Smala riding back in search of us. He had ridden, foolishly, until late the night before, thinking always that we were ahead of him. Then, exhausted, he had sheltered in a village. In the morning, realizing his mistake, he had turned back. Now he was a bit disgruntled—chagrined at having lost us, his charge, on a plain trail, and peevish at having missed his meals. Apparently he had arrived at the village too late for the midnight feast of Ramadan, and then had slept through tea; and when he awoke after sunrise the fast had begun and his host, a good Moslem, had not seen fit to break it—so Smala had not eaten since we left Wursach. I was rather amused at this, and not very sympathetic over his night adventure—especially since Smala was a man who pretty much enjoyed his meals, and since any one with just a little common sense and average eyesight would have known from the rain-beat trail that two horsemen had not preceded him. Nevertheless, when we met I opened my saddlebags and we shared my lunch while waiting for the horsemen to come up, and he soon regained his humor.

Then, during the fine afternoon, our reunited party leisurely followed the Ab-i-Pew out of the rocky mountains and into the belt of loess-covered foothills that lean against the mountains on the north and west.

By evening we were in Farkhar—like Jurm across the mountains another small outpost at the end of a new telephone line and motor road from Khanabad. Like Jurm also, Farkhar maintained a hakim's residence, and here we were cordially received, given fresh, clean rooms, and feted with sweet melons and all the other good foods that Afghans serve their friends—including, as a special rare treat, a fine string of speckled trout freshly caught from the Ab-i-Pew (the full catch of which, we were slyly informed, was, by decree, normally packed in ice and sent to His Majesty the King, in Kabul).

For the first time since before I had been ill in Skarzar I had a chance, after our night feast, to undress in privacy; and I experienced the humiliating surprise of finding myself very lousy. My undershirt was thickly populated with well fed, healthy body lice, and—to my shame for not having discovered it sooner—my body was covered with bites. I had been irritated by itching for more than a fortnight, but, under the stress of constant action and crowded, temporary billets, had vaguely blamed my Jaeger underwear and thought nothing much about it. From the varied sizes of the little beasts, I must have been carrying several generations, including, no doubt, representatives from all the villages where I had slept. There was little to do about it then, except discard my clothes—or discard my objections to the lice, which was not easy. When morning came, however, I dressed in my remaining wet clothes—my extra change of clothes, like all my other kit, being still damp with Anjuman River water—and walked in the sun until they were dry. Then I boiled the infested garments and sun-dried everything.

All this fuss about a few cooties only marked me a tyro in Asiatic travel, and nearly lost me the respect of my companions; for the villagers, as accustomed to lice as an oak to its parasite mistletoe, were bored by my fastidiousness, and the hakim was even a little impatient.

Early in the morning he requested that I photograph his little son—a request which he clearly indicated was of more importance than my sanitation. So, while my laundry kettle boiled, and after I had walked myself dry in the sun, I set up the camera; and as long as fresh subjects continued to arrive—which they did for a long while after the word spread that I was taking pictures—I mixed sanitation and photography. Afghans love to be photographed.

From Farkhar our trails were easy; most of our days were pleasant; our marches were long.

On November 10th we sent the pack train on ahead while Smala and I delayed to dispatch reports and mail to Kabul via

Khanabad. Then we bade the hakim farewell and rode after our packers on fresh horses that he had secured for us.

But it was late at night before we came again up to our baggage. We took a wrong turning; our new horses were poor beasts that could not travel fast; we dallied over geology and loitered while the fine, crisp, autumn sun was warm, enjoying to the fullest—after the broken Khwaja Muhammeds in which we had been prisoned—the new freedom and wide vision of the mild, open, rolling, loess hills that stretch from Farkhar northwestward to the Amu valley.

On the trail we learned that our packers had gone to Kala Aoghan, but we seemed never to arrive, nor to learn just where the place was situated. The hill shadows lengthened, and white frost crystals formed on the shaded slopes, and the afternoon passed imperceptibly into that rare variety of twilight when an orange afterglow lingers in the west even after a clear white moon has cast its own thin shadow. And still we plodded on.

Of three men whom we questioned separately at dusk, the first said that we were very near to Kala Aoghan, the second said that we were very far from it, and the third said that he had never heard of it. When there was no longer light to read a compass by (since it was always essential to keep our map position), I took my bearings from Polaris, and recorded the time at each point of turning.

Finally we intersected the motor road that we had followed from Khanabad to Faizabad a month before, and by this we came, after a while, to the outskirts of the village, where a friendly guide helped us through the maze of crooked lanes to the court of the "local governor." There, despite my repeated injunction—given again over the laundry kettle at Farkhar—that hereafter we sleep in our own tents and not in village huts, we found our men assembled in the snug security of the governor's adobe quarters, and in these we joined them without a protest.

The young governor, who was with them, at once led Smala and me from the crowded hut with the smoky center fire to his own room. A glowing charcoal brazier warmed the place, and carpets covered the earthen floor. There Gorband shortly brought

us a large platter of steaming rice and fowl. But our meal coincided with the midnight feast of Ramadan, and so all the men came trailing after Gorband and joined our meal and then remained.

When the eating was finished, and the fingers were all licked clean of oil, a servant filled the communal water pipe and placed a glowing coal upon the bowl, and passed it several times from mouth to mouth around our little circle of squatting men; whereupon each in turn filled his lungs with the cool tobacco smoke and, relaxing, exhaled it audibly back into the smoky room again, while among the others an animated conversation rippled on in Persian.

After a while I dozed; and soon, one by one, the men refused the pipe and dozed beside me, reclining against the wall; so for a little time the room was quiet. Then the governor's servant made a light and started the water pipe again; and the pre-dawn supper of tea and bread followed, that enables all good Mussulmans to endure the days of righteous fasting. Then a little more drowsy sucking on the pipe, a little more dozing by the wall, and it was dawn and we saddled our mounts and started on the trail again.

It seems incredible now, but before evening Smala and I had lost our packers again; and again we spent half the night in search of them. When we left Kala Aoghan the men were directed to march on to the next hakim's post, in Kishm valley, and there to wait for us. Smala and I then turned back to identify the rock outcrops that we had passed in darkness the night before; so it was late when we turned again toward Kishm and the village of Mashad, where, we were told, the hakim had his court.

When evening came we were still some miles out on the open trail, and we again travelled on by starlight in the cold, clear night until finally the dogs of Mashad heard us and started barking in the distance. Without the barking of dogs these scattered villages—all walled and windowless—would ever be lost in darkness; but always their dogs bark out a warning and so reveal them.

Twice previously this night Smala and I had been misdirected on the trail. But now we followed the dogs and came directly

to the village wall. We shouted for a guide, but we got no answer. Once Afghan village doors are barricaded for the night they seldom open up again for strangers in the dark. We only wanted information—directions to the hakim's house; but we might very well have been some one else wanting something else, and no one in Mashad was taking any chances.

Finally, after enough futile yelling to awaken the entire valley, Smala asked me to remain outside with the horses while he entered one of the huts alone. When he returned he brought an unwilling guide out with him (having forcefully pulled the fellow from his hut); and, lest we be misinformed again, I suggested that we keep him with us until we actually found the governor. So we hoisted him up behind the saddle on Smala's horse and started back down the trail as he directed. Only then, for the first time, we were informed that the hakim had moved his court some miles downstream.

Long after midnight, after the early moon had gone, our tired horses were slowly picking their way in darkness, we came upon two soldiers asleep by the trail—guides, we soon learned, who had been sent out by the hakim to find us when we failed to arrive long after our pack train had come in. Only a few yards beyond the sleeping soldiers the dim, shaded form of the big robot loomed large before us, and we came to the gates of the hakim's court.

Of course the soldiers followed us and took full credit for having found us on the trail and delivered us safely. The guide, whom we had kidnapped from Mashad, became a hero too for having so valiantly led us down the valley in the night. And Smala and I, who wanted only food and sleep, were proclaimed intrepid travellers and made the principals of a celebration that lasted until dawn, when it was then time to saddle up and go to work again.

As day was breaking I rode back alone to see the rock that I had passed in darkness, for still my mission on all our marches was to map geology. I left my party billeted behind; but I rejoined them early, so that I might rest a little before again making the night an opportunity for prolonged feasting.

At the next dawn we marched together down to the mouth of the Kishm and then up the bare Kokcha valley on the trail to Faizabad. In the early afternoon the fine weather drew in, a storm threatened, and we camped early on an overhanging sandstone ledge above the noisy river. This contented me, for while the others had been making normal marches I had done double duty in keeping up my mapping, so that rest—without the stiff, unrelaxed politeness of a hakim's court—was a blessing doubly grateful. So I lay still in my open tent while the men, in high good humor, made merry round their brushwood fire. We were nearing Faizabad, which for most of them was the end of the journey, and they were glad. They were in good spirits, too, because life in the low country was much easier than we had known it in the mountains—trails were smoother, the winter wind less biting, our food more varied and abundant.¹

During the night rain came beating on our tents again, and in the morning (Sunday November 14) we broke camp in rain and plodded all day in oilskins with a steady downpour beating down the valley. Only for a few minutes in the evening the low, thick clouds broke in the west, showing high masses of red and gold. Then the wind turned, and the storm came back and beat upon our tents another night.

Two interesting diversions led us to forget the rain:

The first was gold; the second was an earthquake. One of the reasons for retracing my way along the Kokcha (instead of taking the old trail from Kishm via Daraim I should have preferred), was to check reports that had come to me of alluvial gold somewhere in the Kokcha valley below Faizabad. As is usually the case, these reports had been very definite in character when we were far from the scene of reported mining, but became more and more vague as we drew nearer. Along the river we saw a few gravel heaps where it appeared some work had once been done; but no one gave us any concrete information that could be verified. Villagers some distance above Dasht-i-Amani, where we had

¹ An item I particularly relished on these long, raw rides was the dried fruit, particularly the dried mulberries, that we were able to get. These, with a few almonds which are also locally indigenous, proved to be one of the best "quick energy" rations I have ever used.

understood the richest placer areas were located, denied all knowledge of the gold, saying that they had never heard of any one working on the Kokcha gravel bars. And then, actually before we were out of sight of their village, we saw men working in the river.

We let the pack train go ahead while Smala, Russak, and I rode our horses through the shallow water of a minor side channel to an island where the work was going on. Five men were busy on a bar with two improvised sluice boxes made of willow boughs with sheepskin riffles on a spillway. One was picking boulders from the gravel; two were carrying the gravel in willow baskets and dumping it on wicker screens over the boxes; the other two, using long-handled dippers made of gourds fastened on the ends of sticks, were washing the auriferous sand through the screen onto the sheepskin, where the heavy gold concentrate was held while the light sand washed back into the river. The concentrate caught by the sheepskin was panned, separating the gold from the heavy sand.

Only the top layer of sand and fine gravel was worked, the gold occurring apparently as "flood" gold that had been deposited during the late stages of high water when the river began to drop its load. The men said that if they went much below the surface layers they found no gold—although it seemed doubtful whether they had ever gone deep enough really to test for bedrock placers. They were content to take an easy, small yearly profit by gleaning only the annual "crop" of surface gold. Each year after the floods had passed, they said, they started from near the mouth of the river and worked their way upstream, stopping only where they found good "colors," and moving on when their values ran too low. From their work and the account that they gave, it could be estimated that they earned from nothing to a maximum of two dollars per day per man, depending upon whether they found good values or not.¹ This was my first sight of precious metal in Afghanistan.

¹ This figure is based on the rate they were paid for their gold by the Afghan National Bank, a rate considerably below the world price of gold. The Afghan National Bank has a monopoly on the handling of all the Kingdom's newly mined gold, as it has on every other natural resource in the Kingdom.

Shortly after, while we were riding to overtake our pack train, two separate, heavy rock slides crashed down the precipitous valley wall at the same time not far ahead of us. It was late in the afternoon; and, as it had been raining all day and all the night before, I considered that the saturation of the steep slopes had loosened the surface material and so started the slides. Yet I was puzzled that they should have occurred simultaneously, and that they were so deep as to send up clouds of dust. Beyond, we came upon several other places where the road was strewn with large boulders and broken rock from other slides; and still farther on we found that the narrow, artificial ledge on which the road was built had itself cracked and partly fallen from the mountain side. Only after all this evidence did I begin to realize that we had actually ridden on horseback through a severe earthquake without feeling it. This was verified when, shortly, we came to a village and found some of the mud huts shaken down, several men injured by falling walls, and all the people still very much excited.

One more long day in the saddle, and another night ride, brought us back to Faizabad. When there was no longer light enough to read a compass, Smala and I built a small cairn beside the road, temporarily abandoned the traverse, and galloped on ahead of our packs into the village from which, thirty-six days before, we had ridden south. In the interval we had crossed a major mountain range, and ridden a circuit—and mapped—over five hundred rocky miles.

We rode directly to the governor's house: to the guards' challenges along the darkened alleyways boldly replying without a halt that we were the government engineers returned.

During our absence a Company lorry had brought us mail, and all my kit from India: my medical chest and bedding roll, and many other things which, now that we had sampled the country, I had learned to do without, and which, accordingly, even after so short a time in the East, seemed to be unnecessary appendages of the West.

Finally, late at night, the weary pack train came stamping

into the courtyard; and in the ensuing confusion and turmoil of hoarse, tired voices and champing horses—which must have disturbed his entire household—the gracious governor of the province, the Honorable Said Abaas Khan, arrived with a servant bearing hot tea for us, and personally made us welcome in his house.

CHAPTER V

SOME DAYS IN FAIZABAD

FROM NOVEMBER 16th I spent three weeks in Faizabad. My intention was to remain two days and then move on to Duang, but when I mentioned this to Said Abaas he frowned, and repeated the information that the captain at Parwara had brought to me a month before.

"Orders have been received," he said, "not to permit you to enter the military zone. I am very sorry, but I have no authority to countermand these orders. That can only be done on authority from Kabul!"

Duang, of course, was not only in the military zone—it was practically on the Russian border; and he firmly refused to sanction the journey.

I was left with two alternatives: I could abandon the proposed trip to Duang and return at once to Kabul, or I could wait in Faizabad for renewed permission to go north to the border. The first was the easier choice; but it meant deserting my principal mission into Badakhshan, which was to examine the gold deposits at Duang. On the other hand, if I waited too long in Faizabad I ran the risk that winter snow would make it impossible to get my motorcar out over the road to Khanabad; and there was, of course, no assurance whatever that the permission to go north to the border would be renewed. But I was always confronted with the risk of impassable trails in Badakhshan, I had much work to do on reports, and Faizabad was a good place in which to do the work. So I decided to stay there for a while. I asked Said Abaas to do his best to get the order countermanded, and I instructed Smala to telephone to Khanabad and to Kabul each morning until we had some definite word regarding this mysteri-

ous order.¹ Both men agreed to do their best. Then I settled down to draw a map and write reports.

I saw much of the Honorable Said Abaas during this period. He came to my rooms often evenings when his work was done, and, with Smala translating, we talked of many things. I showed him the map that I was making, and explained in every detail the work that we had done and the work that I still hoped to do.

He took a keen interest in the rifle that I carried,² and we exchanged hunting stories: his experiences along the Amu Daria and mine in Africa. We shared an interest in horses, and he was especially proud of his own stable. Mostly, though, we discussed international politics, and I was much surprised to find him so well informed in general, and so recently informed on current political events.

Usually, on these occasions, a servant came with him bearing fruit and almonds, and we ate informally while we talked. Sometimes our refreshments were melons, sometimes apples or pears, or pistachio nuts, raisins, and dried mulberries.

One evening Smala and I arranged a dinner for him, serving only food that we bought locally. Eight days later he returned the dinner. Both meals were served in the rooms that he had given me to occupy. Ours was a simple meal which, for the most part, Smala prepared alone. His was more elaborate, and was served by a corps of servants who arrived with a great array of steaming plates of hot pilau (of rice and fowl), and trout, and preserved fruits and other sweets.

Once, during conversation with Smala, I mentioned that I should be glad to take any photographs the governor might like. I had in mind that this might be one way of repaying the many kindnesses that he had shown. A few days later, without any more having been said about it, Said Abaas appeared in my doorway dressed in a formal frock coat, with morning trousers, stiff white wing collar, and a very self-conscious pose. He said nothing, and I was puzzled until Smala said that he had come to have

¹ It was then possible to telephone from Faizabad to Kabul by having the message relayed.

² A sporting Springfield by Griffin & Howe, New York.

his photo taken. So I stopped work and we set up the camera in his garden. Then his two little girls, previously dressed up for the occasion, appeared in bright, new dresses and stood beside him for the picture.

Generally, however, the governor was a busy man. Each day he was in conference with some provincial village chief, or with the local military leaders or local mullahs, who came to him regularly. Much of the time he was holding court or settling some dispute. When the weather was fair he sat in a great chair in the garden with the others in a circle on the ground around him. They moved from place to place, keeping in the sun for warmth.

There was much excitement when a case came up between a woman and her husband (it is unlikely that a woman in Afghanistan could have a case against any one else). Although a woman cannot divorce her husband, her father or her brothers usually take it upon themselves to see that she gets a fair deal from the man who has married her.

On this occasion the men at the trial assembled, as usual, in a circle around the governor's chair, while the plaintiff, an elderly woman, squatted under her shawl some distance to one side. Evidence from several of the men was heard first. Then, when the lady was permitted to bear witness, she lifted her veil enough to address the court. She spoke excitedly, and in no uncertain terms, like a woman who feels that she has some real grievance to express. I could not understand enough of what she said to follow the case in detail.

Usually, at such trials, the governor consulted a mullah before giving a verdict or passing sentence.

During this time I worked steadily on reports and maps. Each day I received assurances from Smala that he had spent the morning telephoning to Khanabad and Kabul for permission to continue on our mission. And each day I received assurances from Said Abaas that he had received no authority to permit us to proceed.

For relaxation Smala and I walked in the hills outside the village, or wandered about in the old bazaar exploring every street and open shop. Always, on these jaunts, we were followed

by most of the small boys of the village (and many of the older ones too). When word spread that we had crossed the Khwaja Muhammed Mountains since our first departure from Faizabad, we were accorded all the respect reserved for heroes. Even the governor paid tribute to our feat, remarking on more than one occasion that the pass between Anjuman and Wursach was considered too risky to traverse except during the four summer months. Most persons who tried to cross at other times, he said, were lost in storms and never seen again.

I lost a little of this prestige, however, a few days later when I shaved my beard. In preparation for work beyond the Khyber I had grown a beard on the slow trip out to India, so that I was wearing one when I entered the country. It grew full during the month that I was away from Faizabad. Then one night, in an idle moment, I sought to singe it, having no scissors and wanting to trim it up a bit, and it caught fire. So I shaved it all off.

Smala, who had always shown a little pride in serving me, was much perturbed (although he himself was smooth-shaven) and asked that I let it grow again; and later several of the other men came and asked me not to shave again. So I grew another beard.

Most men in Afghanistan, especially those north of the Hindu Kush, wear full beards, although many of the civil officials and students in Kabul shave. The mullahs teach that the Holy Prophet wore a beard, and that which was good for him should still be good for any man.

One day, shortly after we came back to Faizabad, Smala and I got horses and rode out to complete the traverse that we had abandoned on the night of our return. On the return, in one of the very narrow alleys between the bazaar and the governor's house, we came unexpectedly upon a yak, the first that I had seen. Apparently it was the first that my horse had seen, too, for he was much frightened and refused to pass until the yak was herded through an open gateway in the high mud wall that lined the way. In this region also we saw the two-humped Bactrian camel, which is native only to high central Asia. In other parts of Afghanistan, where camels are used, they are the one-humped Arabian.

On another occasion, north of Faizabad, we fell in with a funeral procession from a small village and moved to the burial ground with it. In death, as during life, the mullah was the *chargé d'affaires*. He had washed and perfumed the body, and wrapped it in fresh new cloth. (He would not have done this for a woman: women must look after their own dead.) No coffin was used. The corpse was lowered in a large stone-lined grave, with the head to the east, and face uncovered. When the religious rites were done an arch of loose stones was built over the grave, and this was then covered with a mound of earth, leaving the occupant in a comparatively large, open underground room. One sees many such graves in burial grounds along the way that have caved in, or been dug open by dogs.

In all of this time no word was received from Kabul regarding Duang, and as my reports were nearing completion I urged Smala to more emphatic action.

Then on November 27th word came that we were free to go.

I ended the reports and arranged my kit for another pack-train journey, while Smala and Said Abaas assembled fresh horses and men to take us north. Few of the men wanted to go. In only two more days Ramadan would end, and there would follow three days of feasting; and naturally they wanted to remain in Faizabad for the holidays. Several of them actually had to be pressed into my service by the governor.

Among my own men, Russak and Gorband also came and asked to be released, and in view of their previous dissatisfaction, I let them go. In their place we took Nadir, a strong young fellow whom we had come to know in Faizabad. He could cook a little, and in other ways had made himself useful to us; and, it should also be said, he was then the only one in Faizabad who really wanted to go north with me.

Late on the 2nd of December we left Faizabad with eight horses. Smala, Nadir, and I were mounted; and we had four pack horses and a guard of one mounted and one foot soldier. We followed down the east bank of the Kokcha and, in the evening, camped in sullen company on a sand bar by the river.

It was good to be in action again, and I had an exhilarating ride on the little black stallion that had been furnished me.

There was a mare among the pack horses, and Blackie had his mind on her to the exclusion of all else, and made no secret of it. When she was ahead he was crazy to race to her, but if I tried to ride him past her I had to use the whip. Several times, for the fun of it, when she was ahead, I let him run. The mare, like any woman, pretended not to take the slightest notice.

It was unusual to have a mare with the pack horses. Afghans are ashamed to ride mares, and therefore few are seen outside the districts where horse breeding is carried on. Afghans also think it sinful to castrate their horses as we do—on the ground that that deprives them of the pleasure of sex, and anything which even diminishes the pleasures of sex, even of a horse, is not to be countenanced. Consequently, practically all horses on the trails in Afghanistan are stallions, with no mares in their company. Therefore, by the peculiar sensitivity of their masters, the stallions are still deprived of the pleasures of sex, unless of course there really is more pleasure in anticipation than in accomplishment—a fact which I much doubted after spending about ten months on the trail with the stallions. One very real aspect of this situation is that the temper and high spirits of the animals causes no end of trouble in handling a pack train on the trail.

Late that night, after all the others had gone to sleep, a soldier entered camp bearing a message from the governor at Faizabad: Word had been received that our Company agent was bringing mail, and that he wanted to see me personally in Faizabad.

Since we had not yet gone far I sent Smala, in the early morning, to verify the message. He rode fast and was back in camp by noon, repeating that I was wanted in Faizabad. So we turned back, somewhat to my dismay, but to the great delight of all the men.

It was well that we returned. After four more days of waiting, our Company agent arrived. With him was an Italian mechanic who, it then occurred to me, could drive my car out and leave me free of it until after my northern examination work was done. This would make it unnecessary to return to Faizabad, so that I could continue explorations along the Russian border



THE AUTHOR'S PARTY AND THE GOVERNOR'S MEN AT FARKHAR

THE GOVERNOR OF FAIZABAD AND HIS DAUGHTERS





WASHING GOLD ON THE KOKCHA RIVER



between Duang and the village of Chah-i-Ab, lower down the Oxus, where I wished to go. Accordingly, when they left a day later, it was arranged that they take the car to Chah-i-Ab and leave it there for me.

It was good for the men to be in Faizabad during this season too. As the month of Ramadan wears on, the fervor of the Moslems steadily mounts, and of course the festive time comes when the month is past and the fast is broken.

All through this period our routine of work was much governed by the fast. Five times a day the men gathered in the mosques to pray, or spread a cloth upon the ground and prayed alone if on the trail. During these times of prayer the bazaar was closed, and no one worked. On Friday, their Holy Sabbath, everything was closed and no one worked.

In Faizabad at sundown the time for evening prayer was signalled by a cannon shot, and each evening as the red sun sank nearer to the western mountain crests we came to anticipate this; it was like watching a burning fuse that leads to a blasting charge and waiting for the explosion. When the shot rang out the dogs barked, the donkeys brayed, and the mullahs called the faithful once again to pray. Then the mosques (there were several in Faizabad) disgorged their congregations, and men broke their daily fast and began to take their nightly pleasures.

I believe that the Afghans really ate more at night, during this month of daily fasts, than ordinarily they ate during the day. Certainly they ate enough not to become too famished through the day, especially since the only exercise they got was gained in prayer. Twice during this time men came to me for medicine, distressed from overindulgence.¹

Often during this time I was secretly guilty of the average engineer's impatience with such manners. Men who eat three times during the night, and stop for prayer five times during the day, accomplish little work; and it occurred to me many times

¹ Many men came to me here for medicine, despite the fact that in Faizabad there was a free government dispensary under the charge of a Kabul-educated doctor. Mostly they wanted quinine for malaria which they had contracted in the rice fields of lower regions.

that probably if they worked more and prayed less they would be happier and God better served. But this is the great sleep of Islam. And the foreign engineer in Afghanistan who accomplishes the most work will always be the one who takes most fully into account local custom and arranges his schedule accordingly, without any interference.

In the dull, gray, snowy dusk of December 4th the evening cannon boomed repeatedly instead of once as usual. This signalled the end of Ramadan: The Festival, a time of general rejoicing—like our Christmas holidays—was now at hand.

Shortly after the evening prayers were ended, Smala and I received invitations to all the official celebrations, beginning with the governor's banquet, which alone, of all, we each accepted.

The dawn of the Festival was white with fresh, new snow, and heavy snow still fell at morning-tea time when provincial troops arrived inside our small courtyard and began, half-heartedly, some very unprecise close-order drill beside our rooms. Soon the snow clouds parted, the sun shone warm, and the court turned muddy under marching feet.

After a while the local and provincial dignitaries began to arrive, and the troops were drawn up in line; as each new arrival entered the courtyard they were called to attention, their officers and the visiting official embraced, and then the visitor passed down the ranks, where each man in turn stepped forward and kissed his hand. These men arrived (or at least they entered the courtyard) in the order of their grade or position—the lowest first; and they all remained and embraced in turn those of higher grade who followed them. Near the end the commandant of the Faizabad garrison pranced in with a smart escort of red-coated, regular guards (armed with good repeating rifles), and then came the Honorable Said Abaas Khan, the governor, and finally a band of professional musicians (or maybe the village band?), marched in and played while the troops marched out, and the guests and officers retired to the banquet hall.

When they had gone a servant from the governor came for us, and Smala and I followed him to the hall where the feast was spread. Outside the door, where soldiers stood on guard, a hun-

dred pairs of empty babouches bore evidence that the guests had all assembled. Inside the thickly carpeted hall a hundred turbaned guests sat cross-legged on cushions by the walls, and a hundred beards were turned toward us as Smala and I, the last to enter, passed down the long line of men to our places at the end of the hall.

Then servants came and spread long strips of cloth on the floor over the carpets, and others brought great trays of food (including all the dishes that I have already described, and many others) and placed it on the cloths—the main dish, as usual, being pilau, boiled fowl buried in a great pile of steamed rice.

At a signal from Said Abaas the company began to eat, each man taking his food with his right hand without the aid of fork or spoon. I did the same, though later some thoughtful one quietly brought my plate and spoon from my camp kit. Every one ate heartily, without speech, until the meal ended. Then the High Mullah of Badakhshan pronounced the benediction. Next came servants with a jug of water, a basin, and a towel, and each man in turn took water from the jug and rinsed his mouth and spat it in the basin, and washed his hand and dried it on the towel. Then there was another prayer and the party arose.

Most of the assembly then filed out of the hall, but the higher ranking members remained for fruit and tea. I excused myself and left, and later they sent fruit to me.

On the following days similar feasts were scheduled at the house of the commandant, and the financial secretary's home.

Every one is happy during this period. In the bazaar the men, dressed in their best poshtins, embraced one another in the streets; families, including the women, went from house to house to call on friends; and small boys played with colored eggs (like Easter eggs) at a game where each tried to break the other's egg without having his own broken.

In Kabul, during this period, the foreigners are presented to the King, and great military pageants and public games are held.

CHAPTER VI

IN SEARCH OF GOLD ALONG THE OXUS RIVER

WHEN THE feasts of Ramadan were ended we rode north again on horseback out of Faizabad, camping at evening in crusted snow beside the Kokcha.

The next morning (December 9th) found us picking our tortuous way along a dry stream bed, winding gently up to Mazik Dasht, the low divide that marks the height of land between the Kokcha and the Amu Daria. All day we moved up slowly without much spirit, the day being dull with low, gray clouds, the men drugged from too much feasting, and the horses—sensing our dampened feelings—moving under their awkward packs as though they were ending a journey instead of just beginning one.

But then, when the lowering clouds were bringing down an early dusk and we were about to camp before the pass was reached, things began to happen in a lively fashion. From a side gulch ahead came the stirring clatter of swift horses' hoofs on loose, dry gravel, and a moment later three mounted men charged out into our valley and came galloping fast toward us. A few yards away they pulled up with a flourish, their excited horses lathered from running, but still fresh and eager for more action. The leader of the three—a fine, athletic, curly-bearded figure on a magnificent white stallion—greeted us curtly, and without waiting for our reply announced himself as the hakim of Shahr-i-Buzurg, a village to the west. The other two men were his armed servants. A soldier from Said Abaas in Faizabad had preceded us, the hakim said, and ordered him to guide us to the gold of Duang. We were to billet for the night in a village far beyond the pass. We had been slow. Now we should follow him and hurry. Thereupon, without waiting for a reply from either Smala or me,

he whirled his horse and started at a gallop up the trail; and his servants, who seemed greatly to enjoy their master, galloped after him. Smala and I—since the man at once commanded both obedience and confidence—galloped after them, while Nadir and our slow-moving pack animals were left crawling behind us on the trail.

Soon we reached the summit of Mazik Dasht, where a cold north wind swept the snow in long, low drifts and covered it with yellow dust from the frozen loess beneath. Here, on the highest point, our dynamic guide again abruptly stopped, this time to say his evening prayer. A servant, as if trained to anticipate his every action, rode up and took his idle bridle reins; and his steaming horse stood still, while the hakim, impatient even with his God, bounded from the saddle and spread his robe upon the snow and knelt there beside us in the trail.

I dismounted too and stood in reverence of the silent scene: the animated man at prayer beside me on the mountain; the little group of horses braced against the wind, the broad panorama of deep, dark, narrow valleys that dropped to the great valley of the Oxus at their lower end, and the rough, wild mountain land of snowy Turkistan that rose out of the Oxus valley and spread northward to the far horizon over Russia. While I stood, fascinated by the scene, the setting sun broke through the clouds in a last full flood of light that for an instant colored all the distant mountains red; then the rosy sun sank somewhere back of Persia, and the color faded, and soon all was lost in darkness save our patient, frosty horses.

In silence we mounted again and galloped forward in the night. The rough trail was slippery where ice had formed, but the hakim knew every foot of it and the rest of us let our horses follow him. Even in the darkness we still rode fast. From those ahead, the pungent scent of hot horseflesh came back to me, clods of snow flew in my face from their racing feet, and sparks flew from their iron shoes scraping rocks beneath the snow.

Far down the northern slope we entered a darkened village, but, without stopping, galloped through while a chorus of startled dogs barked after us. Thinking of our pack train so far behind,

I suggested that we should stop, but our escort only galloped on, and we rode with them.

Later we came to another village, Kasab by name, where the hakim stopped and called a greeting. Three men came from the darkened huts, moving cautiously until they recognized the hakim. Then they called to others, and soon there was a crowd about us. They welcomed the hakim with warm affection, helped him from his horse, and kissed his hand, ignoring the rest of us. Some of the younger men took our horses, loosened their cinches, blanketed them, and led them about to cool. The older men led us to a hut dimly lighted by Aladdin lamps.¹ Felt was spread on the earthen floor about a fire that smoldered in a hole in the center of the room. Most of the men of Kasab crowded into the room with us. Some one fanned the fire to a blaze and made a pot of tea; they brought bread, and eggs cooked in oil, and later they came with a sheep that had been killed and cooked after our arrival. Every one ate heartily, including the awakened villagers, and when the bones were licked dry "we cleansed our beards of the mutton fat," the water pipe was started and passed around, and the talk began.

Soon I became drowsy in the fetid atmosphere, the talk became incoherent, some one spread a blanket over me, and I was lost in sleep.

Some time during the night Nadir arrived with the pack train.

Early the following morning we were in the saddle again. Several stalwart Kasab men rode with us. All were armed.

As we rode leisurely along through the snow I questioned Smala regarding our wild ride of the night before. Why had we come so far? Why had we not camped beside the trail as I suggested? It is unusual for Afghans to travel in the night.

Smala answered, "This border region is not safe."

"But we are still several miles from the river. Surely . . ."

He looked at me thoughtfully for a moment. "Did you ever hear of that oil concession that our government recently granted

¹ These lamps burned oil that was pressed from the seed of a plant grown locally. I saw the presses in operation, but was unable to find the plant or learn its name.

to the Americans?" he asked. "And did you ever hear of the mineral concession that is still under negotiation? Well, the Russians—yes, and the Germans too—wanted that."

"But that is settled, the concession is ratified."

"Nothing is ever settled as far as *they* are concerned. If there should be an incident? If an American engineer should be killed inside Afghanistan? If it could be made to appear that the Afghans cannot maintain order in their own country?"

I must have looked skeptical, for with some hesitation he continued:

"Have you noticed how many men have come with us this morning? We got word recently that Soviet agents had crossed the river to prevent your Duang examination. That is why Said Abaas ordered the hakim of Shahr-i-Buzurg to go with us, and that is why the hakim refused to camp by the trail, but took us to Kasab where he could trust the people. Armed sentries were posted all around our hut last night, and they are still with us this morning."

I made no further comment, but became more alert to other things than rocks and minerals.

We reached the village of Duang early in the afternoon. There are extensive mulberry groves in the valley there, and some ancient oak trees grow about the village. At this lower elevation the snow was partly melted, and I picked a dry spot beneath the trees and pitched my tent.

Later in the afternoon I reconnoitered in the hills between Duang and the Oxus, while two armed guards, whom I had not invited, rode beside me.

In the evening the hakim brought an agent of the Afghan National Bank, who had preceded us to Duang, to show me the gold that he had collected from the valley.

Later, when I retired, sentries were again posted around my tent.

On the morning of December 11th I awoke with a severe cold and remained in camp to rest. But the Afghans refused to take my illness very seriously. When they saw that I did not intend to

look at the gold deposits that day, they invited me to go hunting with them.

In this district they still practice the ancient sport of falconry. These birds are trained to catch the fat partridges which are so abundant in Badakhshan. Now, my visit being an excuse for a holiday, they elected to go hunting. I suggested that Smala go in my place, which he did. When they returned they had one partridge, but said that after the falcon had caught the partridge, an eagle, of which there are many in these mountains, dived on the falcon and carried it away.

In this district, also, they hunt wild boars. They drive them with dogs, while the men follow on horseback with rifles. They kill for sport only, and leave the meat; for pork, of course, is strictly taboo in Islam. The only other hunting that I heard of in Badakhshan was that for mountain goats (ibex?) in the higher country, and "tigers" in the "jungle" on the large island of Urtā Tagai which is made by the Oxus at Chah-i-Ab.¹ I was never really sure whether the tigers that they spoke of were really tigers or leopards. The few skins that I saw were leopard skins. On the other hand, there are a few tigers, smaller than the Bengal tiger, in eastern Iran, and some may range this far up the Oxus valley.

In the evening a band of horsemen came to my tent at the hakim's request and played a game that I had often heard described as the most popular sport north of the Hindu Kush. There are variations, but in general the game is played in this manner:

First a goat is killed and placed on the ground in an open place where men can ride. Then all who desire to play line up on horseback at some designated distance from the goat, or more often, they form a circle around it. At a given signal they race in and try to get the carcass. From then on it is entirely a matter

¹ It should be mentioned in this connection that the use of the word "jungle" in Afghanistan is somewhat misleading. They use the Hindu word *jāngal* to refer to any vegetation, and not necessarily dense tropical growths. Afghanistan is a very barren country. Often, before I learned better, when I was told that in such-and-such a valley there was a great *jāngal*, I expected to see a jungle. Usually I found a little patch of green bush scarcely high or dense enough to hide a rabbit.

of individual strength and skill, each man trying to get possession of the goat and ride away from all pursuers with it. Whoever accomplishes this is the winner. When the game opens the first to reach the goat bends from his saddle, grabs it as he dashes past—usually at an extended gallop—swings it across his saddle, or under his leg, and races on. If he has an open field then he tries to get away; but usually some other player, or more often several other players, intercept him. Then there is a tussle, with every one who can get a hold pulling on the goat. During this struggle most depends upon the strength of the rider, and the game much resembles the mounted wrestling that we used to practice in the cavalry; but when one man finally jerks the goat away from all the others who are tugging at it and succeeds in breaking away from the circle of contestants, then it is entirely a test of the horse's speed. Here at Duang only a few men played, but it is said that on the Turkoman plains as many as several hundred horsemen play at once, and there the price of a horse is largely judged by its behavior in the goat game.

On December 12th we walked through the Chil-con-Shar, or the Place of Forty Mines, as the valley is known from which the Duang gold comes. At the hakim's suggestion the old chief of Duang, and several other men who had knowledge of the gold, went with us as guides. But we gained little information from them, and it was plain that they had no intention of showing me more than was obvious. Their attitude was one of silent, passive resistance. When I had followed the old chief somewhat aimlessly for a while, thinking that he was guiding me, and I asked him finally where we were going, he replied that he was only following me. Of course, from the villagers' point of view, it is entirely to their disadvantage to allow any stranger to locate a mine. For generations the little village of Duang has profited by taking gold from the Chil-con-Shar, and yet under the laws of their Kingdom they had no legal title to it. So secrecy is their only safe policy. Nevertheless I probably saw considerably more than they realized.

The gold recovered from the Chil-con-Shar is all placer. The

villagers trap this gold much as the central African natives trap elephants, that is, they dig pits for it to fall into. The valley is very narrow with a steep gradient, and it is choked with boulders much too large to handle. So they dig holes between the boulders to act as riffles. When the stream fills these holes with sand and gravel the miners shovel them out and wash the sand for gold.

I spent the greater part of the day hiking slowly up the valley. During this time my aneroid indicated that we had gained nearly two thousand feet in elevation. Along most of this distance it was easy to follow the placer workings, although the small stream was frozen and under snow so that I could do no panning. We turned back without reaching the upper limit of the diggings, but if the men with me spoke the truth we had come nearly to the end of them. There was, however, still a large catchment area above us.

The little placer in the Chil-con-Shar very likely is operated now about as profitably as it ever will be. More important, probably, is the source of the gold that finds its way into the placer; and my attention was directed more to the possibility of finding a lode mine than to exploiting the stream. Much of the rock exposed along the stream is mineralized, and the country upstream is so well exposed that the whole prospect certainly is an attractive one.

When we returned to the village late in the afternoon Nadir had the horses loaded and was ready to move.

From Duang I wanted to follow a trail along the bank of the Oxus River downstream to a place near Chah-i-Ab, called Noor Aba, where I had heard there was another gold placer. But neither Smala nor the hakim would listen to this proposal. That low trail was distinctly *not* the one to follow in daylight, they said; in many places the river is narrow and the trail within easy rifle shot from the Russian side, and frequently Afghans had been fired on from across the river. So we sent Nadir and the pack train ahead by an overland trail, and after some little delay in the village we rode after them.

Eight horsemen came with us—eight hilarious, yipping horse-

men who played the goat game all along the trail, until the carcass of the goat was nearly torn to pieces.

By sundown we had climbed high above the blue water of the Oxus, where a surface crust was packed and frozen so solidly over the snow that we could dismount and lead our horses without breaking through. Some time after dark we came to a village, known as Chowgoni, where Nadir had my tent pitched and a bright fire burning. As usual, the villagers had gathered around to watch what we were doing; and being in a rather frivolous mood, feeling good from having found a warm camp prepared for me, I tried to joke with them. Of one of the old gray-bearded men who stood near by, I asked with pretended seriousness why he had permitted it to snow before my work was done.

His reply, when translated, was a stern rebuke.

"Don't joke with God," he said.

The last few miles of our trail before reaching Chowgoni was very icy, and at the village we heard that the trail ahead was blocked by ice so that horses could not pass. Accordingly, the hakim recruited all the idle men and sent them ahead in the night with axes and picks to open a way for us.

The next day we moved west again, through a country of bedded sandstone and shale that is dissected by many canyons and steep-walled valleys. In many places our trail followed thin, knife-edged divides where a slip to either side would have sent horse and rider plunging several hundred feet into a snow-filled gulch below. In other places the trail was steep, and so slippery with ice that our smooth-shod horses could not stand.¹ At these places the men who had been sent ahead from the village cut away the ice, or covered it with sand. Nevertheless, before we got out of this rough country our horses were lame from many falls.

By evening we were in lower, warmer country. We spent the night at another village, called Sang-i-Khah, from which the hakim of Shahr-i-Buzurg turned back; and the next day we descended to the arid Oxus plain and rode on to Chah-i-Ab.

¹ I never saw a rough-shod horse in Afghanistan, nor met a blacksmith who knew how to make a spiked shoe.

At Chah-i-Ab, which is a large town and an important local trading center, we were hospitably welcomed by the local governor and given rooms in his house. He had a large establishment, with living and administrative quarters all in one large adobe building that faced out into a courtyard surrounded by high, thick adobe walls. One main entrance, wide enough to drive a lorry through, entered the courtyard from the street. After sundown this was closed by two heavy wooden doors, each deeply carved and ornamented, and at all times it was guarded by armed sentries on either side.

In the evening Smala and I and our new host—a bleak, thin-faced, beardless little man—sat together till late in the night munching grapes and melons and planning my trip to Noor Aba. My hired horses had delivered their loads and turned back and, with other aid, I was promised fresh ones from Chah-i-Ab early the following morning.

When morning came, however, the fresh horses were not there; and—somewhat impatiently, I am afraid—after a short wait I urged Smala to secure them. Poor Smala! Always, it seems, I was impatiently urging him to do something. I must have been a driving master, but there seemed to be no other way of getting any work accomplished. Smala, as was his custom, then impatiently urged the governor to find us the promised horses, and the governor—after the fashion of governors—sent one of his soldiers to secure them for us. The soldier went to the market place and soon came riding back on one horse and leading four others. Smala, Nadir, and I threw a light pack on one of these and mounted the other three, in readiness to start for Noor Aba.

While we were at this, the governor was quietly engaged in talk with a group of men gathered near us in the courtyard, apparently hearing evidence on some case, or settling some dispute. I did not pay close attention until suddenly he gave a curt order and several of his men grabbed a powerfully built fellow of middle age, stripped off his heavy greatcoat, threw him face down upon the ground and began to beat him—not brutally, nor savagely, nor vindictively, but very deliberately and methodically. While others held the victim down, four men swinging stout,

green poplar poles as thick as broomsticks slashed his buttocks as hard as they could, until the poor fellow's screams pierced the fresh morning quiet and he begged the governor for quarter. Then they roped his ankles, pulled up his legs, and beat the soles of his bare feet until his cries were reduced to convulsive moans. The governor ordered his release, and the fellow limped away whimpering like a hurt animal in great pain.

When the cries from the courtyard reached the streets outside, an inquisitive crowd soon gathered beyond the sentries, eager to see what was going on inside. Nor were they disappointed, for soon another man—this an older one with a long black beard—was on the ground receiving similar punishment.

What was the punishment for?

Disobedience of the governor!

While the beatings were still in progress Smala, Nadir, and I, and the soldier who had brought our horses (and was under orders to remain with me until we returned from Noor Aba), rode cautiously out through the crowded gate. In the town it was market day, and the bazaar was jammed with a milling crowd from the surrounding districts, so that we had to move carefully to keep from trampling them. I was riding in the lead with the others close behind, when a burly, bearded giant came charging through the crowd at me, bellowing that I had stolen his horse. He grabbed my bridle reins and, before I fully grasped the situation, was trying to claw me from the saddle; but then the soldier behind me lunged his horse forward and beat him off with the heavy quirt that these soldiers carry. At first my assailant was defiant and tried to fight back; but, being unarmed, he soon wilted under the heavy blows and turned and ran. The soldier followed, scattering the crowd and overturning the merchants' stalls, until the man escaped through an open doorway where the horse was unable to follow. Fully warmed now to his task, the soldier returned and rode in front of me, slashing every one within reach of his whip, until the angry crowd parted and we rode quickly away through a deserted side street.

I was still not fully aware of what had happened, and when we drew rein outside Chah-i-Ab I asked for an explanation. It

proved then that earlier in the morning, when I had demanded horses and every one had passed the buck until finally our soldier friend was sent to fetch some, he had simply gone to the nearest serai, or livery, where those who had ridden in to market had stabled their horses, and taken the best he could find without consulting the owners. Neither the owner of the horse nor I knew this at the time, and naturally when he saw me riding out of town on his horse he thought that I had stolen it.

It was folly to think then of going back and facing the angry crowd in the bazaar again, so we rode on, travelling north through the open valley.

Some miles ahead, an old man attached himself to our party, the governor having sent word ahead that he was to guide me to Noor Aba. The old fellow was presented to me as an important local chief and one of the richest men in the district. He claimed to be seventy-five years of age, and his clear, wrinkled, leathery skin bore evidence of age; but his eyes and spirit were those of youth, and he sang lustily as he galloped his horse beside us, with his long, white beard bent in the wind. It was a pleasure to ride with him, for his cheerful nature did much to alleviate the memory of the sordid incidents of the early morning; and he appeared to gain equal pleasure from his ride with us, making it a lively frolic.

Several miles north of Chah-i-Ab, the level irrigated fields narrow and the trail enters a rocky gorge. At this place strong springs of clear, cold water emerge from the gravel that underlies the plain. They join to form the Ab-i-Khasar, which flows through the gorge to the Oxus. Several miles down the Ab-i-Khasar we came to a dry gulch which enters from the east. This was the Noor Aba, and we followed it. From this gulch, it is said, great riches have been taken in placer gold, but now the placer is exhausted. Possibly because of this, our old guide, who was one of the men who had profited most from the mine, was much more willing to show me everything than were the men of Duang. He had nothing to lose and possibly something to gain if I could find an extension of the gold deposit.

The country rock exposed on the sides of the gulch holds no

promise of a lode mine, as at Duang. Instead the country there consists of poorly consolidated beds of sandstone and conglomerate with no evidence of lode mineralization.

Noor Aba must then be the reconcentration of an older placer in the conglomerate that is now high above the valley floor, I reasoned, thereby directing more of my attention to the hills than to the worked-out stream bed. But the Afghans had already reasoned this out for themselves, and they had actually located and worked the original pay streak—a conglomerate bed that outcrops on the hillside above the valley. Caves, from which they had dug out the loose gold-bearing gravel and carried it in baskets down to water, mark the pay streak. The old guide led me to these caves after I had seen all the relics of the valley workings and questioned him about hillside deposits, and together we crawled about in the shallow workings until evening, without gaining much idea of the value of the deposit. Then we climbed down to our picketed horses, and the hot meal that Nadir had prepared for us, and later in the soft night we started back to Chah-i-Ab.

With stronger horses, Smala and I rode on ahead, leaving Nadir and the soldier to bring up the pack. We entered the town about midnight. As in all Afghan towns at midnight, the dark streets were deserted of men, but full of dogs which protested our passing as much as had the angry men in the early morning bazaar. Their infernal barking soon aroused the town, and when, after wandering through the crooked streets we mistakenly came to the mosque instead of the governor's house, a sleepy mullah came out and put us on our way again. Finally, at the great carved gates to the governor's courtyard the sentries challenged us, and held us dismounted until a servant from within came out and passed us.

This ended my horseback work in Badakhshan. Altogether, in about two months I had mapped between five hundred and six hundred miles of mountain trail in addition to that covered by motorcar. Now it was nearly Christmas, and some report from me was long overdue in Kabul; so I planned to drive back as soon as possible.

When we arrived in Chah-i-Ab we found our motorcar de-

posited there for us with several leaves broken in both front springs, and the rear axle pin sheared again from the rough ride out of Faizabad. Rather than delay then for repairs, I thought to drive on without, at least as far as Khanabad, because much of the road that far is over the level Oxus plain and I expected that our front transmission alone would pull us over the only steep grades on the route—the low range of hills that lie between Pul-i-Shema on the lower Kokcha, and Bagh-i-Mir on the road east from Khanabad.

So in the early morning of December 16th we loaded our little baggage and left the north. In Khanabad we made temporary repairs, working all one day with a local blacksmith fashioning iron springs that turned out to be tempered either too soft or too brittle. Ten miles farther on our way both front springs were flat again, and the soft iron pin with which we had repaired the rear axle again had sheared. As best we could on the road, we blocked up the front end of the car so that I could steer, and drove on with only the front wheels pulling. All night I drove, with Nadir sleeping on the load, and Smala smoking cigarettes beside me. We breakfasted at Doab and then moved on toward Kabul, creeping along slower than the caravans and with much less confidence. Finally, on the long pull up to Shebar Pass the front transmission failed, and the car refused to climb the last steep grade. Just as before, we had plenty of power in the front wheels, but not sufficient traction to pull up the loaded car. However, when off-loaded, the empty car moved up, and I drove it to the crest about a mile ahead and a thousand feet higher. But our weary bodies rebelled at the thought of carrying our equipment up, a task which we could not have completed easily, and so I sent Smala and Nadir down to commandeer a group of donkeys that were coming up the trail behind us. In Afghanistan the government holds the right to temporarily commandeer private property in this manner on the trail, and Smala and I had learned to assume this authority. Pretty soon, however, Nadir came back and asked me for my rifle. Smala had requested the donkeys and the drivers had refused, suggesting rather, with fine sarcasm, that we should get a motorcar. This vexed Smala greatly, and, what was worse, it greatly hurt his delicate pride; and so he wanted to en-



THE CHIEF OF DUANG (seated right) AND HIS MEN, WITH THE AUTHOR (second from left)



THE "GOAT GAME" AT DUANG

force his request with a gun. Curious to see what would happen, I gave Nadir the rifle, knowing (although Nadir did not know) that it was not loaded. Then I remained behind some boulders unseen above the trail. In a short while the little donkeys came panting up around the boulder pile, each loaded with some article of our kit; and behind them, to my surprise, came a string of camels that I had not seen before, each camel loaded with bits of our baggage; and behind the animals the drivers came walking glumly like unwilling prisoners of war, while behind them all marched Nadir and Smala strutting proudly with the empty gun.

From the summit of Uni Pass, where we reloaded, it is mostly down grade to Kabul; so we rolled on again under our own power, arriving finally after three days and three nights on the road from Chah-i-Ab.

During the leisurely holidays in Kabul that followed, I naturally made inquiry regarding the order that had been sent out preventing my entry into the military zone in Badakhshan, and this incredible story was given me:

Shortly after I first left Kabul for the north with full official permission to travel freely, word was maliciously voiced in the bazaar that I was not an American engineer at all, but really *Lawrence of Arabia* in disguise on a secret mission for the British government. The rumor spread, as rumors do, until finally it came up for official attention in the Foreign Office, and I was placed under close surveillance until an investigation was completed.

This is hardly a matter for jest when it is understood that the legend of Lawrence is even more powerful in Afghanistan than in other parts of Islam farther west. His power among the Arabs made a profound impression on the Mohammedan imagination, and his association with the British-India Army on the Afghan frontier made him very real to them. No one there now believes that he is really dead. Rather, according to the many stories, he is in disguise on "some secret mission for the British government." I heard this belief expressed many times in the villages. And later, when civil war broke out again on the border while we were in the Hazarajat, it was—according to the stories—Lawrence of Arabia, who was organizing the tribesmen!

CHAPTER VII

FROM KABUL TO HERAT THROUGH KANDAHAR

FIVE MAIN trails converge, like the spokes of a wheel, on the city of Kabul. The most important of these is the one we have already followed from India over Khyber Pass. Next in importance is the trail which leads north from Kabul over the Hindu Kush to the Russian border, with branches leading into Bamian, Afghan Turkistan, and Badakhshan. This one also we have followed, to Badakhshan and back again. A third trail leads southwest from Kabul to Kandahar; another leads south from Kabul to the town of Gardez, from which branches lead into the fighting provinces of Khost and Waziristan; and the fifth leads west from Kabul over Uni Pass and on along the high mountainous backbone of the kingdom to Herat, with branches southwest into the Hazarajat and Ghor.

From map study alone, without some real knowledge of these trails and the traffic that they carry, one is almost certain to draw wrong conclusions regarding their significance as transport routes. First, one is likely to exaggerate the importance of the city of Kabul. Here not "all roads lead to Rome," although Kabul is, of course, an important hub. In the same way, one is likely to exaggerate the importance of the Khyber route. The map makes it appear that four main trails drain all the interior trade directly into Kabul, from which it flows on down through Khyber as through a funnel. Nor is this quite the case.

Rather, in the broader picture that brings in focus more of Asia, and not Afghanistan alone, one finds that these trails form parts of two main continental routes of trade and conquest from Asia Minor, Russia, and Mongolia (around the barrier of the Himalayas), across Afghanistan to India. One of these main roads

leads over the mountains and the other leads around them. The first two trails mentioned above, the one from India over Khyber to Kabul, and from Kabul north over the Hindu Kush to Russia, comprise the mountain route. This is the shortest, but the most difficult, way from Russia into India. Kabul is only a caravanserai, just a stopping place along this road. The other main route runs from Herat in the west, around the southern fringe of the mountains to Kandahar. Herat connects by easy roads to both Iran and Russia, and from Kandahar a main trail leads southeast to Quetta, the southern gateway into India from the west. This is the easiest route to India from the west. Like Kabul in the north, Kandahar is only a caravanserai along this route. The road from Kabul down to Kandahar is an important interior trail in Afghanistan, but in the broader picture it is a shuttle road between the two main continental routes. The other trails which converge on Kabul are only of limited local importance, although the road west from Kabul over Uni Pass is an alternate, though difficult, cross-country route.

In addition to being natural, arterial highways, the importance of the two main through routes mentioned above has been recently much enhanced because they are now the only ways that have been improved for motor transport. If they are blocked, the commerce handled by the camel and donkey caravans could follow other devious trails from the mountains down to India. But progressively more and more of the commerce in this part of the world is now carried by motor lorry (there is not a foot of railway in Afghanistan), and the lorries must follow these two roads.

Likewise, if these two roads were blocked, dismounted riflemen could raid India by many obscure mountain trails, but any mechanized army, or any army with heavy transport bound for India, from necessity would be confined to either the Kabul-Khyber trail, or the road through Kandahar and Quetta. This is why Peshawar and Quetta are military outposts in India's system of defense; one reason why the Baluchistan railway was built was to outflank the open road south of the mountains; and this is also the reason why England, during the century past, so expensively occupied Kabul and Kandahar, and so strongly urged the Afghan

defense of Herat whenever Russia was known to look with lust on India.

The northern highway over the mountains from India to Russia is described in previous chapters. Let us look closer now at the southern route, for this is the one we travel next. During the Christmas holidays in Kabul plans were made to explore southern Afghanistan, taking advantage of the milder winter there. Kirk, who had joined me in Kabul at Christmas, elected to reconnoiter the southwestern desert between the mountains and low Seistan. My plans called for travels in the southern foothills region during winter, working gradually north into the higher country again—up the Helmand valley if possible—as spring advanced. Also at this time word came that an old friend, Frank Buie, would join me in this work if I could meet him at the Persian border. Accordingly, in early January we set out on the trail from Kabul down to Kandahar.

This trail climbs from the Kabul River valley to the broad, high region of Sher Dahan Pass, where the drainage to north and south divides. Then it finds the head of Tarnak River, which leads it gently down to Kandahar.

Along this way are many villages and two historic towns: Ghazni and Kalat-i-Ghilzai.

Ghazni, situated just south of the divide some ninety miles from Kabul, commands the high country. Like Kabul, this old ghost town was once the seat of great medieval empires, and a place of tremendous riches gained in honest commerce drawn from India. When first invaded by the Mohammedans, this region is said to have had an annual trade of \$5,000,000 in indigo alone. And when this trade was not enough to satisfy the ruling lords more wealth was gained from raids on India for plunder. In one period alone, during the first third of the eleventh century, no fewer than seventeen organized major raids for plunder are recorded. And this precedent was repeated many times. During this period, the city was famous throughout the Asiatic world as an impregnable fortress. Later, in the twelfth century, this powerful citadel challenged the rise to power of Ghor, across the Helmand, and

after a devastating struggle, its ancient splendor was destroyed. Finally the city's prominence in Asian history ended with its siege by Genghis Khan. In recent history, Ghazni was captured by British-India forces in 1839, surrendered in 1842, and recaptured and destroyed by them again in 1842.

Old Ghazni is now a place of ruins; an old castle at the northern end of town high above the plain, a part of the old city walls, and two remarkable towers still stand. Beside these ruins, the present town has recently been somewhat revived by the new motor road which again has brought considerable commerce with India in fruit, and skins, and wool. From here, also, come the fine poshtins for Kabul.

Kalat-i-Ghilzai has no such noble history. It is a minor Afghan fortress situated on a rocky eminence two hundred feet above the plain by the Tarnak River. It is known largely for its defense by British-India forces in 1842. But it is known more for the fine race of men whose name it takes—the Ghilzai. These Afghans range north to the Kabul valley and east to India. They are of the same stock as the Pathans, and their clans—the Suliman Khel, the Nazir Khel, etc.—collectively rank first in Afghanistan in military strength and commercial enterprise.

Kandahar, at the southern end of this trail, shares the stormy history of Ghazni and Kabul. Read this account of major episodes! Captured from the Afghans by Mahmud of Ghazni in the eleventh century; captured by Genghis Khan in the thirteenth century; by Timur in the fourteenth century; by Baber in the sixteenth century; recaptured by the Afghans in the sixteenth century; captured from them in the seventeenth century by Shah Abbas of Persia; recaptured by the Afghans again in the eighteenth century; captured by Nadir Shah in the eighteenth century; captured by Amad Shah in the eighteenth century. The last event led to the beginning of the modern Afghanistan, and to recent history; but even during this period the city was captured by the British-India army and recaptured by the Afghans twice during the wars of the nineteenth century.

The present city of Kandahar is probably the greatest business center in Afghanistan, and, being in close touch with business

India, it has taken on somewhat the aspect of an "outside" city. The streets are wide and open, and there are open city squares, fresh with green grass, where small boys play ball. The main street is cobbled, and there are electric street lights in the business district. The bazaar is clean and open, with well constructed buildings. A wide assortment of goods is displayed, including Afghan fruit, from the near-by provinces, that rival any in the world for quality; and trade goods from India, and much cotton cloth and trinkets from Japan (these formerly came from England), and all the wares that Afghan metal smiths produce. As one should expect from this, there is a freer air about the people, and much less the atmosphere of a remote fortress than one senses in Kabul and Ghazni.

From Kandahar the main road bears slightly north of west for two hundred thirty-three miles to the administrative post of Farrah on the Farrah Rud; then runs north another hundred seventy-four miles to the ancient city of Herat.

Between Kandahar and the Helmand River this road is still mainly in the foothills belt, but beyond the Helmand it skirts the mountains on the one hand and the desert on the other. Northward the country rises from the low foothills in the foreground to range after range, each higher than the one before it. Southward the country slopes away in a level plain, gravel-covered and dry and barren. Where streams emerge from the mountains their valleys form sharp reentrants into the hills, and they flow briskly; where they enter the desert they broaden and meander and become sluggish, and finally evaporate. Only the stronger of them reach the desert lakes in lower Seistan, and there they too are dried by the desert sun.

This is open country south of the mountains, along the desert section of the road, where armies might deploy, and where tank corps might maneuver like ships at sea. The streams are the only obstacles. Of these, the Helmand and the Khash Rud are important.¹

¹ We crossed the Helmand on an old pontoon bridge (a masonry bridge is now under construction by a German engineer). Between Kandahar and the Helmand are several stream crossings, of which the Arghandab is the most important.

There are few settlements along the desert section of this road. Girishk, at the Helmand crossing, is the only important town. It is an administrative and commercial center serving a small populous section up the river. Like so many other Afghan towns it is made up of a small bazaar nestling in the shadow of a great earthen fortress, or castle, with mulberry trees and gardens under irrigation from the river. There is now a new government rest-house there for travellers.

Dilaram, on the Khash Rud, is only a stopping point for travellers. There is an old robat,¹ or caravanserai, to serve the camel caravans, and a more modern resthouse to serve motor travellers. Save for caretakers, there is no permanent settlement.

Farrah is the next important town. Like Girishk, it is an administrative post and trading center for the small settlements up the river. It is a dreary little town of low mud rooms with domed roofs, like brick kilns, or large, old-fashioned beehives. There is a governor's residence, a bazaar, and a barracks that serves also as a guesthouse.

Between these posts there is no settlement on the road—only an occasional water hole protected by an old robat.

The road north from Farrah leaves the desert fringe and crosses the ends of the low ranges that strike southwest from the high central mountain massif. Hence it is a hilly road, partly in barren desert valleys and partly on barren desert ridges. It mounts from an elevation of 2,460 feet at Farrah, in the valley of the Farrah Rud, to 3,550 feet at the town of Sabzawar (ninety-four miles north), then to nearly 6,000 feet on the ranges beyond, and finally down to about 3,000 feet at Herat in the valley of the Hari Rud.

There is only one settlement of any importance on this section of the road. That is at Sabzawar (now called Sheendan by the Afghans), where a rich little oasis nestles in the confluence of the upper tributaries of the Adraskand Rud. Sabzawar is much like Farrah, with a local governor and a small bazaar. Otherwise only a few desolate robats stand by this lonely way.

¹ A square inclosure surrounded by thick, high mud or adobe walls, often with small living rooms built against the inside of the wall; a caravanserai affording protection from robbers.

Herat, in the northwest, is a metropolis rivalling Kandahar, although it has long lost its ancient commercial importance. Like Ghazni and Kabul, the history of this old city is pretty much the history of central Asia. Like them, too, its early beginning is not known. It probably started as a Persian settlement about 500 B.C. For some centuries it flourished in peace, being only little obscured then by the glory of Ghazni. In the twelfth century it was destroyed by the Turkomans but recovered under the Kings of Ghor, to become a ripe prize for the Mongol visitation under Genghis Khan. The Mongols destroyed the city twice (1232 and 1398), and on both occasions massacred the population, then estimated at several millions. But by the fifteenth century Herat was again flourishing, and during this period it became the great center of literature and art in the East. Most of the great historical works on Asia date from Herat during this time, and most of the noble buildings, whose ruins still partly stand there, were then constructed. During all this time Herat was essentially Persian; the Afghan tribes then dwelt far to the east. But after the rise of Afghan power in the middle eighteenth century, Afghan tribes were settled in Herat; and they have since controlled the city—sometimes under Kabul and sometimes independent of Kabul. All subsequent attempts by Persia to regain Herat have been vigorously resisted by both Britain and Afghanistan—the British policy being dictated mainly by the assumed strategic importance of Herat in the defense of India from Russia, a military conclusion not now entirely acceptable.

The present city of Herat (with possibly 10,000 inhabitants) is distinguished from most Oriental cities by the great earthwork on which the city is built. This is about two hundred fifty feet in width at the base and fifty feet high, and supports a wall fourteen feet thick and twenty-five feet high, with many towers. A great moat surrounds the earthwork. Five main gates enter into the city.

Something of the ancient grandeur of the city is still evidenced by the ruins outside the walls. Several tapering towers, or minars (of the old *Tal-i-Bangi*), still stand to exhibit tile work of great beauty in color and design; and on the fields north of town the

plain is strewn with relics of pottery and structures that once were the wonder and glory of the Orient.

Like so many other Afghan towns and villages, the location and size of Herat is largely fixed by the presence and extent of fertile, irrigable land. The cultivated area of the Hari Rud here extends for nearly one hundred ten miles along the valley, and is up to fifteen miles in width. It begins in the vicinity of Obbeh, fifty miles upstream from Herat, and continues down the valley to Kuhsan, where the river swings northward near the Iranian border. Low desert hills bound all this cultivated land.

It was the 11th of January when we left Kabul. Snow had fallen on the high country during all of the previous day and night, and the atmosphere was still spongy with the large, soft flakes that enveloped Kabul in a silent pall of frozen fog and darkness.

Our transport consisted of three cars. Smala, Nadir, and a driver were in the lead in mine. Kirk and I followed in a light Ford. And Kirk's outfit brought up the rear under the charge of Osif, a lad from Jalalabad who had been assigned to Kirk as interpreter by the Kabul government. (Probably more than any other single one Osif helped smooth our way in southern Afghanistan.)

In the beginning we moved forward slowly, breaking our own trail through a foot of heavy snow. The cold, shadowless half-light of early dawn found us ascending Sher Dahan, where the depth of snow increased. But, as the day advanced, the weather cleared. By the time we reached Ghazni we were under a low ceiling of thick snow clouds; but the air was free of flakes, the road smooth and white ahead. Ghazni is fourteen hundred feet higher than Kabul, and in winter is often snowbound for long periods.

Beyond Ghazni the snow diminished, and by evening we were running in dust near Kalat-i-Ghilzai. With evening also came car trouble: tires punctured by Afghan hobnails, and another broken spring. By midnight we were in Kandahar with two cars, the other remaining disabled on the road.¹

¹ We found three petrol depots along this route, one at Ghazni, one at Kalat-i-Ghilzai, and one at a small village called Mukur about midway between the other two.

Morning in Kandahar brought heavy rain, with more snow behind us on the mountains. We sent the drivers back to repair the abandoned car, and the interpreters to report our arrival to the provincial governor, while Kirk and I canvassed the bazaar. We made a practice of inspecting the bazaars wherever we stopped. Possible future operations would have to depend largely upon local supplies, and we wanted to know what we could depend upon.

On the 13th we hired a lorry to transport our heavier loads, and sent one of our own cars back to Kabul to relay more field equipment south. Two days later we were in Farrah, after an overnight stop at Girishk, having encountered no higher adventure on the road than more engagements with Afghan hobnails in our tires. It being winter, few travellers were on the road—only an occasional camel caravan led by dark, lean desert folk.¹

As we progressed south from Kabul we found less official interest in our mission. In Kandahar, after waiting one day, we were received pleasantly but briefly by the governor. But he professed to know nothing of the central government's interest in mineral deposits, and refused us all information about minerals because our credentials from Kabul did not specifically state that we were entitled to receive such information.²

In Girishk we were also cordially received by the hakim; but he also knew nothing about any official interest in mines, and was more disposed to be pleasant than informative. In Farrah the local governor was too busy to see us.

Nevertheless we chose Farrah as a base for our explorations in the south, not because it offered any special attractions but because no other place was situated more conveniently to serve our needs. Kirk's interest lay to the south of here, and mine to the north.

We rented (at a price that later marked us for dupes) a serai that had two tight living rooms, an inner court where pack animals could be assembled, and some open stalls that would garage

¹ Petrol depots on this route, at Kandahar, Girishk, Dilaram, and Farrah.

² We got this information by messenger later, after weeks of delay in correspondence with Kabul.

our cars, and there set up headquarters. The winter rains had come to the desert, driven in by cold winds that lashed the plain. The narrow streets of the village, normally choked with dust from the fine soil brought down by the Farrah Rud, were deep in mud; and most of the desert Afghans were content to sit by fires inside their huts. Our rooms were cold, and no fuel could be had at any price until Kirk encountered a string of camels entering from the desert with a load of soggy brush, and bought the lot before they reached the bazaar.

By the 16th we were comfortably settled and deep in plans for our campaign ahead, while Osif was busy recruiting camels and drivers for Kirk and Smala was enlisting horses and men for me.

In the meantime, Buie was due on January 18th in Islam Kala, on the Iranian frontier west of Herat, and I was scheduled to meet him there. So, on the 17th, Smala, Nadir, and I left Farrah together in one car to keep our rendezvous. It was still cold, and dark storm clouds swept down from the northern mountains, driving heavy rain against us and leaving the road awash. More car trouble caused delay, and it was evening before we passed through Sabzawar. We drove on in the night, with the motor groaning like a sick camel as the car skidded repeatedly in the mud and we slowed to straighten out again and face the storm. When we gained the higher ridges north of Sabzawar the rain changed to snow, but on their northern slopes, where we descended into the valley of the Hari Rud, it turned to rain again, coming now gently and now in violent gusts. There was a steady downpour when we reached Herat and passed through the great gate, where the massive earthwork hung over us like the high loess embankments that hang over the ancient camel trails in so many parts of Central Asia.¹

The weird city, caught in the thin, rain-washed beams of our headlights, and visible only through the little opening where the windshield wiper had scraped away the mud, appeared quite dead—except that drenched sentinels stood guard at every street intersection, with water streaming from their rifles and parka hoods, and as we passed each one in turn called to the next on duty

¹ Petrol depots at Sabzawar and Herat.

down the street so that word of our progress preceded us through the darkened city.

Beyond the center of the city we were directed to a comfortable hostelry where we slept out the night in luxurious peace from the driving storm and lurching car—without food, for it was more trouble at that hour to rustle a meal than sleep without it.

Morning saw us on the road again, following the main valley westward, over sand hills where the road left the river, and through flooded muddy flats where the river was near at hand. The storm was passing, and by the time we reached Islam Kala in the early afternoon the sky was clear again.

Islam Kala is a control post of the Afghan-Iranian border. A commissar, or immigration officer, a customs inspector, and a telephone operator are stationed there, but there is no settlement. Like many other places in Afghanistan, Islam Kala now bears the stamp of a progressive Kabul government. Until a few years ago, this post consisted only of an ancient, adobe, fortlike serai, or castle, built over a water hole in the desert. The present station consists of a new modern brick building surrounded by a brick wall. With the improvement came a change in name. Formerly Islam Kala was known as Kafir Kala (Kafir's Castle, or castle of the infidel or unbeliever), and it is so shown on all existing maps. The new name means Islam's Castle, or castle of the Mussulman—this change completing the elimination of all Kafirs from Afghanistan.¹

The old castle and fort of Kafir Kala now stand in ruins not far from the newer structures. Two sides of the old castle have caved to piles of mud and sun-dried brick, exposing to the open desert the rooms inside the other walls that still stand firm. The deep well of fresh water that nourished the place is still protected by arches of brick and mud, and above this a part of one of the main towers of the old castle still stands intact. But the water level of the well is now much below the level of the desert plain, and it feeds no garden as once it must have done, although almost any

¹ The old province of Kafir-i-Stan, northwest of the Khyber region, was the last important section in the Kingdom to be forcefully converted to Mohammedanism. Like Islam Kala its name has since been changed from Kafir-i-Stan (Place of the Unbeliever) to Nuer-i-Stan (Place of Those Who Have Seen the Light).

evening it waters a tired, thirsty caravan that plods in when the big, red, desert sun is low, picks a careful way through the fallen debris, and bivouacs in an open room beside the well.

Islam Kala is a lonely post, for few travellers other than the desert wanderers have occasion to pass this way. The men there were glad to have company and made us welcome. We pooled our resources, and in the evening made a meal together. The customs officer, a strikingly handsome young Afghan, had apparently been drinking alone in his rooms before the meal began, and when we assembled he invited us to drink with him. Smala was embarrassed and refused. Afghan interpretation of the Koran prohibits the use of alcohol among Mohammedans, and no Afghan had offered me liquor before; so, out of curiosity, I accepted.¹ From some hiding place he brought out several bottles of "Persian wine" (a cheap concoction of alcohol with various fruit flavors), that apparently had come to him from Iran. We poured out thimblefuls, but while I was tasting mine he drank several and became ill and left the party. Smala and I finished the meal alone, during which he confessed an incident of which I was previously unaware.

In Badakhshan I had half a bottle of whisky in my kit. I finished it in Faizabad during our enforced wait there. Smala saw me use the last of it and suggested that he could get more from the medical dispensary to replace it. All Afghans who have any fixed ideas regarding foreigners are firmly of the opinion that all Westerners, without exception, are habitual drinkers (most of those who have gone to Afghanistan probably have been); and although I refused his offer, still he brought the liquor. I filled a small bottle in my medical kit from it and asked him to return

¹ Afghan interpretation of the Koran prohibits the use of alcohol, but not of tobacco or opium. Practically all the Afghan tribes smoke tobacco, and on the border of the Pamir country north of the Hindu Kush opium is freely used. During the short period before the revolution, when Amanullah was introducing Western customs to Kabul, Western vices appear to have been more popular than most Western virtues, and then drinking was freely indulged in by some students and officials in the Capital. This was suppressed after the revolution. In Iran, which is also Mohammedan, on the other hand, the Koran is apparently interpreted to permit the too free use of alcohol (and also prostitution, and begging, although the latter has been pretty well abolished by civil decree recently).

the rest. Instead of returning it he gave the bottle to Nadir with instructions to keep it in a safe place, so that it would be handy if later I ever changed my mind and called for it. The safest place that Nadir could think of was Smala's bedding roll. And there it remained until we arrived in Kabul, for Smala's bedding roll, along with all our other heavy gear was forwarded to Kabul when we sent our car back from Faizabad. In Kabul, Smala's mother was the first to unroll his blankets and find the liquor. Her natural assumption of course was that the foreigner was teaching her tender son bad habits, and from Smala's tone she was still unconvinced of any other story.

Buie did not arrive at the appointed time, and we waited an extra day. Then, when it was established that a lorry would be along later, I resolved to return to Herat and wait for him there where I could more profitably spend my time searching the provincial archives for mineral reports. We turned back late in the evening of January 20th.

Some hours after dark, while we were running along smoothly on the sand packed hard by recent rains, and Smala and Nadir were dozing in the car beside me, a dark figure in desert robes and turban stepped from the darkness beside the road into the headlights' beam and waved for us to stop.

"Friend or foe?" I asked Smala, shaking him awake.

"Foe," said he. "Go faster."

"Friend," said I doubtfully. "Let's stop."

I eased my gun in its holster and unlatched the door, slowing the car as we came closer. On nearer view the man looked less suspicious, and we stopped. He announced himself a telephone operator and said there was a message for us. No village was near at hand, and to my knowledge no telephone, nor had the fellow ever laid eyes on us before. But experience in Afghanistan teaches one not always to suspect guile, so the three of us followed him. We stumbled several hundred yards through pitch-darkness to a lone, low hut and entered. There was no light inside, nor any candle or lamp to make a light until Nadir struck a match to a sheaf of camel brush. Then indeed in a recess in the thick mud

wall we saw a telephone, and soon we were speaking to Islam Kala across the desert.

A message had come from Buie in Turbat-i-Shaikh Jam in Iran. Could I meet him in Yossafabad (Taibad), across the border, in the morning? I contacted the commissar at the post to ask if we might be permitted to pass into Iran without visas. He promised to give us visas if we had passports. I had a passport, but Smala and Nadir did not. Could he arrange a temporary permit for Smala? Yes, he could.

We turned back to Islam Kala.

My idea was that we would pick up our visas in Islam Kala and then drive on to Yossafabad so as to be there next morning. But that was the West thinking. In Islam Kala again we were invited by the commissar first to eat, and then to talk. That was the East. In such circumstances the West usually acquiesces, so we stopped for food. My revised idea then, a sounder one, was to press my request to leave tonight so as to insure being permitted to leave when morning came.

The meal was slow, and the talk ranged far from our main topic of visas. Finally I steered it back again, suggesting that the night was passing and we were doing neither one thing nor the other.

The commissar, fortified then by the late hour, announced that we could not go on at all till morning. Why? No passports! But I had a passport and produced it. But no visas! Permission to issue visas must come from the Governor of Herat. From Herat! The only communication there was by a single wire stretched across the desert. What authority in Herat could be reached by telephone at that late hour?

Of course they were right: I should have gone to sleep and made request at the proper time tomorrow. But it takes more than a year in the East for a Westerner to learn to wait, and besides I felt sure that, if I waited, another day would be lost in bickering. So I pressed the point, hoping to gain what advantage I could.

Smala and the commissar engaged the telephone; and, marvel of marvels, the call went through. They got Herat. But the Gov-

ernor of Herat was in Farrah. They called Farrah, by relaying through Herat and Sabzawar. And, marvel again, they got the Governor of Herat! But he needed permission from Kandahar to grant so unusual a request as that. So Farrah called Dilaram, and Dilaram called Girishk, and Girishk called Kandahar. Marvel again! They got the Governor of Kandahar! But he was still not big enough to act on his own authority; he must consult Kabul. And so the call went on, to Kalat, to Ghazni, and finally to the Kabul Foreign Office—not a long-distance telephone call with Islam Kala speaking through to Kabul, but a message repeated from station to station all across the Kingdom. I quit marvelling; they got the Foreign Office! Quietly I stole out into the starlit desert and smoked a Persian cigarette. It was nearly midnight. The answer was being relayed back. It came: "Permission granted"!

Still pressing my point, I suggested now that everything was arranged possibly we could start.

"But, Mr. Fox, there is another thing," said Smala.

"What is it?"

"Persian soldiers will stop us if we go now, and our authorities take no responsibility for what may happen to you after you cross the line."

"I will explain to the troops," I countered.

"But they will only arrest you and take us all to Taiabad."

"And besides," the commissar interrupted, "there are thieves and robbers on the road."

"And the road is very muddy too"—from our cook who was listening in the doorway.

I laughed and said that they were only challenging me to go, which I intended doing.

More objections from my loyal opposition.

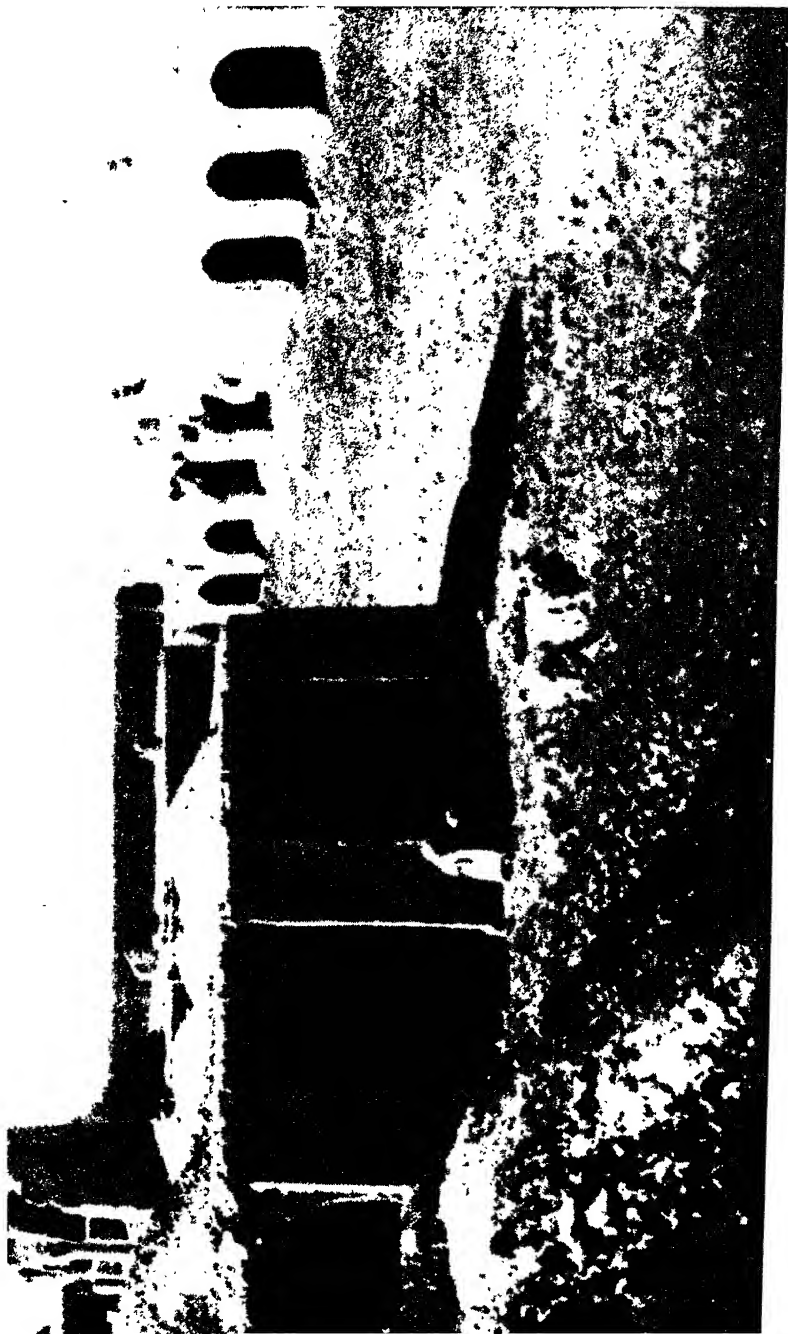
But convinced then that perhaps now we should be able to leave in the morning without any further frontier formalities, I agreed to spend the little remaining night there.

An hour before dawn Nadir called us, and we drove west across the flats where the salt desert was dissolved in mud.

The frontier is unmarked there, and we were unaware of cross-



"CHIL-CON-SHAR"—VALLEY OF GOLD



RUINS OF "KAfir KALA" AT ISLAM KALA

ing it until we saw a Persian fort ahead with soldiers lounging in the early morning sun. They saw us coming and detached a lone trooper to meet us some distance from their station. Anticipating more delay through questioning by the border guard, I sought the initiative by speaking first, inquiring the road to Yossafabad—a sensible question in view of the almost trackless state of the flats after the recent storm. The fellow was obliging. There were two roads, he said, but only this one could be followed safely. This one was under guard of troops, the other was under siege of robber bands. Would he by chance be permitted to guide us? He was delighted, and without stopping to report back to his post he placed himself in the front seat with his long rifle between his knees and came along with us.

With the borrowed dignity of this imposing escort other troops along the way saluted and let us pass, and we reached Taiabad without delay.

Buie was not in Taiabad, and so we waited.

Some weeks before, when word had reached our colleagues in Iran that I was coming through to the border, they requested that I bring a load of heavy-duty lorry tires which they needed, and of which we had an excess. The plan was that I should leave the tires in charge of customs at Islam Kala, where they would clear them; but now that I had come farther I brought them with me. Taiabad is the Iranian frontier control post on their side of the line, and I thought to leave them there. After explaining ourselves to the Iranian officer in charge, and passing some pleasant words with him, I told him about the tires and asked Nadir to unload them. The Iranian officer, however, became politely officious at once, and said that his station could not accept them. Thinking some matter of duty or declaration to be involved, I offered to meet whatever regulations were in force, assuring him that all duty would be paid. But it was not a question of duty or declarations. The tires could not enter, he said, because Taiabad was not a port of entry. How then in Allah's name could goods enter Iran from the east? This is the only regular road across the border from Afghanistan! Oh! They must come in by way of

Baluchistan. And my load of tires? How could I legally enter them? Why they must go back through Islam Kala, and then across Afghanistan through Kandahar to Quetta, and pass the Indian customs there. Then they must come west again over the Baluchistan railway, and enter Iran from the Baluchistan frontier where Iranian customs would again inspect them. Absurd! Is there then no trade with Afghanistan? Afghan goods must also come across Baluchistan! Ridiculous!

So we argued until Buie arrived on a mail lorry from Meshed, and we started back to friendly Afghanistan. We left the tires. I presented them to the Iranian as a personal gift (he had no possible use for them). The regulations said nothing regarding that. Later I heard that they had been duly cleared by their proper owners.

We returned to Farrah to begin our further explorations.

CHAPTER VIII

A WINTER JOURNEY INTO GHOR

WINTER is the wrong season for field work in Afghanistan unless one is entirely independent of the local population. Even in the southern desert the weather is generally disagreeable, and this makes it difficult to enlist local support, for the Afghans like to remain inside their huts during bad weather. Without some co-operation from the local people, a campaign such as ours is likely to fail for want of transport. We fought the transport problem during most of our sojourn in the south.¹

It began when Buie and I reached Farrah together on January 22nd. Previously we had requested the governor's aid in securing pack animals, and back in Farrah again we found several poor horses waiting for us. But they were refused for rent and offered only for sale at double the prevailing prices. We might have taken them except that they were unfit for work. Good horses are not to be had in the south as in the north. A few good private mounts are brought down from Turkistan, but they are never for sale or hire. Most of the transport away from the highway is by camel. We were promised camels, but none ever came.

After considerable search through the serais, and endless bargaining with sharp traders, we finally found a reasonable fellow with a string of fifteen idle donkeys who was willing to earn a wage. We made a contract with him. This broke the market created by our need for animals, and the price fell sharply. Thereafter, after some little bargaining we took three fair horses in addition to the donkeys.

¹ Aerial reconnaissance of geology, with a little ground control, would be very practical in Afghanistan due to the perfect rock exposures. Aerial transport of supplies to field parties in the mountains would also be practical, and would greatly simplify the work.

This dealing took most of three days, and it was late in the afternoon of the 24th when we finally had sufficient transport assembled at our headquarters in Farrah. Seeking then to keep the unit together while the men were of a mind to go, we left Farrah and marched five miles up the valley to a village where we spent the night.

Our party then consisted of Buie and I, Smala and Nadir, the donkey man, and two noncommissioned officers furnished us by the governor from the Farrah garrison. These military fellows we dubbed Fierce Khan and Feeble Khan. Both were meek men, but Fierce Khan wore a great, bristling mustache that made him appear a most ferocious person. Feeble Khan was smooth-shaven and had no chin. We assigned them to help look after the pack animals.

Next morning we moved on twelve miles to the village of Kanisk. That was as far as the donkeys could travel in a day.

In this section the Farrah Rud forms a broad alluvial valley which is bounded by rock outcrops and low hills several miles back from the stream. The main trail follows near the river. Our plan was to send the packers on along the trail while Buie and I rode the flanks and explored geology. It was a simple plan. The trail was good, with many villages along it where we might stop at night.

From Kanisk, Smala rode on ahead to prepare billets for us, while Nadir and the military escort followed more slowly with the packs. Buie and I rode out a line of hills on the east side of the valley. We agreed to meet at a village called Bala Balook farther up the valley.

It was raining in the early morning when we started; but it soon cleared, and we rode under a hospitable sun, basking in the comforting belief that now we had an organization functioning smoothly.

About midafternoon we turned back toward the river, and in the evening came leisurely to Bala Balook. The trail led directly to a well established house where two gentle-mannered Afghans met us. They knew nothing of our interpreter, but suggested that we stay for tea with them until he came.

"He will be here," they said. "Every one passing through the valley comes to this house."

Servants took our horses, and we were directed to a large, white-washed hall, clean and richly carpeted, where tea was brought on silver service. Bolsters were placed on the carpets for us to recline upon. Later a great platter of pilau was served, and the four of us had food together.

Our hosts made a live interest of many things, and were particularly attracted to our rifles. They brought their own arms for comparison, and discussed the relative merits of British, Russian, and German weapons. They had not seen American before.

Smala failed to appear, and at a late hour we were furnished clean quilts and slept out the night on the carpets in the hall.

At dawn came the loud entry of our own Fierce Khan, who complained that he had spent the whole night in search of us, although his appearance gave the lie to that and indicated clearly that he had slept soundly in the nearest village. He said that Smala and our outfit were behind us on the trail.

We breakfasted on bread and tea and then, with a blessing on our hosts, we rode back to meet them entering the village. Smala had five fresh camels, and the fifteen tiny donkeys still were with him. But the donkey man, regardless of his contract, wanted to turn back, and the camel men were agreeable to going on. There were four of them under the charge of a little, red-bearded fellow who swore by Allah that he and his camels would go anywhere with us. So we made a deal with him and let the donkeys go.

We set them on their way with our baggage, with Nadir and Feeble Khan in charge, under instructions to follow the main trail to Zarmardan and keep moving until evening. Buie and Fierce Khan moved out then to work the left flank, and Smala and I rode on the right.

There were ten uninterrupted miles of desert flats to the foothills. We came there on an easy gait and spent some hours examining the rock. Then we started back on a course estimated to intersect our camels' spoor so that we could follow it to camp.

But the freshness of the desert seduced us and we lingered, stopping once to fire at wild gazelle that played well out of range,

and again to heed a wandering madman who hailed us and then ran away babbling, to hide in the brush of a dry stream channel. The desert apparently had long been his solitary home, for he was partly unclad and fully unkempt, with long black matted hair and beard.

When the river was not in sight by evening we rode faster across the sand, leaving a thin dust hanging lurid in the evening sun. When the sun was gone we let our horses breathe, and went on slower, fixing our traverse on a star. In the darkness that followed, shepherds' fires sprang up on the desert where we had seen no shepherds in the day. But when we changed our course to go to them they burned out and disappeared, and others appeared in different directions.

Later we heard running water ahead and then we came to the river, at a place where it flowed black and quiet. I rode down the bank to explore for a crossing. But my horse was crazy of thirst, and he carried me in. The channel was there and we slipped into water over our depth. I called a warning to Smala and spurred my horse and swam him out. Then we went more cautiously to where rippling water marked shallows and we crossed.

Beyond the river we smelled a campfire and saw lights. We cheered each other that we had come directly into camp. But when we reached the flickering lights we found a tent village of the name Daulatobod, with no one much pleased to see strangers in the night.

The old headman questioned us closely for some time, but finally drove his women and camels from the tent and asked us in. Some further urging on our part brought fried eggs floating in hot ghee, and bread and tea, the only food we had taken since morning.

There was no news there of our camels having passed, but the opinion was that they must be on ahead toward Zarmardan. They should have been, had they marched an honest day. It was not worth going on to see, but we were not welcome in Daulatobod.

We asked for guides and were refused. But when they considered the possibility of our remaining in the tent they yielded and designated a young man to lead us on the trail. He demurred,

saying that first he must have his father's permission and his father was at prayer. The old headman picked another fellow who then came with us.

The stars had faded, and the darkness was absolute. The guide felt for the trail with his staff, tapping like a blind man finding his uncertain way across the desert. Smala and I came behind single file, leading our horses, following the sound of his prodding.

As the night wore on, it turned colder and began to rain, and with this added exposure we felt exhaustion and suggested sleep under a sheltering bank on the desert; but the unwilling guide cursed us for fools, and urged us forward.

In the low hours between midnight and morning another tent fire came in sight and we found Zarmardan before us. We followed the flickering light to the village and found there a man and woman sitting together inside their tent beside some smoldering embers. We entered without invitation, while Smala gave hasty explanation, and the couple quickly added camel brush to the fire so as to see us better.

Three camels were in the tent with them, and a baby was sleeping in a basket swung from the ridgepole. The sound of other people coughing and spitting came from the darkness behind the camels. Steady rain beat on the sagging tent. I spread my coat between the camels for warmth and sleep and left the others talking.

Two hours later, when the mullah called for prayer, the camels stirred and broke my slumber. Smala was still sitting by the fire, and rain still came heavy on the tent.

We lingered awhile and then sought out the mosque for better shelter. It was empty, the only mud hut in a village of black homespun nomad tents. We built a fire and began a search for food, since none was offered. At first we were refused; but we were hungry, and I said that we would either buy a sheep or kill one, as they pleased, if there was nothing else. This provoked the mullah to sell us four raw eggs and a little tea, after which he went away mumbling and left us alone to cook our breakfast.

No one in Zarmardan knew about our camel train, and it ap-

peared certain then that we had overreached them. So when the rain slackened later we returned on our tracks in further search of them. Ten miles back across the desert, where we had so tediously picked our way the night before, we found Buie and Nadir inquiring for us in Daulatobad—and the men there were telling them that they had never seen or heard of us.

We lunched from Nadir's ample saddlebags while Redbeard's camels gained the village. He had made only ten miles on a good trail the day before. I had estimated that he should make at least fifteen. Smala and I had ridden about forty-five on horseback, and spent much of the day mapping geology. Now Redbeard wanted to camp again at Daulatobad, having come only three miles since morning. We urged him on, and an argument ensued. He demanded money. I paid him full in silver. Then he demanded time to purchase barley in the village, an hour at least to haggle over weights and prices. I detached one of the soldiers to do that. But Redbeard still refused to move, saying that he was tired. I directed Nadir to take the lead camel, Buie and Smala took others. Redbeard grabbed the ropes and stopped us. I took his rope away, and the caravan started forward. The soldier followed us with grain for the camels. Later Redbeard and his men took the leads and came sullenly.

Buie and I rode together with the party during the afternoon. Later, in the early dusk, we rode forward to find shelter for a halt, for it was still raining, with fresh, low clouds sweeping in across the rolling desert, and it was plain that we should not reach Zarmardan again by night. I instructed Smala to bring the camels on, and left Nadir and the two sergeants to help enforce the order.

Some little distance ahead we found an overhanging gravel bank, where a dry tributary cut through to join the Farrah Rud, affording some little shelter for a camp. There, while thick darkness settled over us, we started an unwilling fire and waited, expecting our baggage before the flame grew hot. But the others did not come.

I turned back on foot to meet them, thinking that they had missed our trail, or that they could not see our feeble flame below

the bank. A mile back I found them stopped again on the unsheltered plain. The camels were down, and the packs were off. Smala and Nadir had one tent pitched, with their own beds spread inside. Redbeard and his men were sheltering in the lee of their camels. Fierce Khan and Feeble Khan were leaning desolately on their rifles, looking very helpless. The camels were complaining. There was no fire and no food. The cold night wind and rain drove through their ranks.

My patience with Redbeard was gone at noon; now I lost my temper too, and swore vehemently at him with all the words at my command. The words he could not understand; but he knew the tone, and retreated before me in the darkness. No one else spoke or offered explanation.

To let my temper cool I returned for Buie, and our horses which we had unsaddled in the shelter of our gravel bank.

Back again in the storm with the demoralized party sprawled in darkness on the plain, Nadir helped Buie raise a second tent and gather our bedding from where it lay scattered about in pools of water, while I made hot food on the *Prīmus* that we carried for such occasions.

When morning came Redbeard asked Smala to tell me that he did not like me well enough to go any farther with us. He said that he would stop in Zarmardan, which in daylight was in sight of where we stood. I sent the party there, and gave Smala a heavy gift of fresh tea and sugar for the mullah, as balm in case we had wounded his dignity by forcing the sale of eggs the previous morning. Buie and I then separated to bring up our mapping of the hills along the valley.

In the early afternoon I returned to Zarmardan and found Smala in the mosque. He had good news for me. The mullah, more impressed now that he had seen the moderate size of our party and our escort in uniform, was friendly, and had recruited five fresh camels in the village. The new men were said to be willing to go anywhere with us for a fair wage, and this we soon agreed upon. But one thing tempered my hearty appreciation of this news. It was still raining, and I knew by now that these camel men would not willingly go anywhere in the rain.

Redbeard was camped in shelter beyond the village, and we assembled there. Buie came in at dusk, and our five fresh camels arrived. The rain stopped when the sun went down, and it appeared that things were about to go smoothly again. Only Nadir was a bit angry when we ate everything that he had cooked, leaving him to prepare more for the trail tomorrow.

The drivers arranged their camels in a semicircle, and in the center built a fire, and spread thin bread dough on hot stones to bake while they settled down to talk the night out—or to sleep in the great, gray felt robes that all desert men west of the Helmand wear. Redbeard's men remained with us, and our escort slept with them by the fire.

Our next goal was the village of Shaoz, some twelve miles farther on along the tributary that cuts deeply between the Koh-i-Khwaja Sarbur and the Koh-i-Besha (mountains) and runs past Zarmardan to join the Farrah Rud. The desert plain ends at Zarmardan, and over most of the way ahead the trail lies in a narrow gorge between the jagged limestone crags. But the trail was described as not too difficult.

We were up for an early start on January 30th, but when I gave the order to break camp and load there was hesitation—a sign that something was bothering the men. First came Fierce Khan and Feeble Khan, then Nadir, and then Smala, all requesting me to go no farther. The camel drivers assembled behind them to urge the same request.

But why, in the Prophet's name, I asked, should we not go on? The sun was bright, and that was good. We were rested and had fed well. Redbeard's men had been given full pay in solid Afghan silver; and wages for the new men were agreed upon. Why shouldn't we go on?

Smala spoke for the party. He said that there were bandits on the trail ahead. Every caravan that ever passed that way, he said, was lost. The thieves fired from ambush in the rocks above, and then came down to kill and rob. It was our ruin to go ahead.

I laughed at them—which was wrong because it shamed them—and they became more insistent then to save their honor. Good

old ineffectual Fierce Khan begged me to take him out alone and shoot him rather than force on him the responsibility of leading our party into ambush. I agreed that I should like to, except that I might need him to help fight bandits.

I tried to reason with them. Their mullah had voiced no warning of bandits the day before when he recruited his own men to go with us; and the men themselves then had no fear. Their fear was born by the campfire in the night, when they talked late and frightened one another with wild stories while their bread was baking; and it matured in the darkness after the fire had died. I told them that, but they listened without hearing.

Then I affected anger, saying that I would take their camels and go alone if they were cowards.

They mumbled protests, and Smala resented me; but after a while they moved to load. Buie and I then saddled and rode off to continue our mapping and left them to their task.

An hour later, from where I worked on a high point above the trail, I watched through field glasses while my sorry caravan moved slowly up the valley. Then I rode down to overtake them. Later Buie joined me, and we stopped and sighted in our rifles, and rode on again with them loaded. We had never done this before. The bandit tales were now telling on us.

We came up to the camel train where the valley widens out near Shaoz. Fierce Khan and Feeble Khan were riding together at the rear of the column, and when they saw us they unloaded their old Enfields and rejoiced that we were still alive.

We made camp in soft daylight a few miles farther on, and the following day we remained in camp drying bedding, plotting the map and reshoeing the horses. The men were easy while the sun was bright and warm, but as evening drew near they became nervous again. The camel drivers came to the tent and complained that they could go no farther north because there was too much snow on the trail (there was no snow in sight except on the mountain peaks), and that they would not stay more than one more night in this camp because they were still afraid of being raided. So the transport problem reared its ugly head again.

It was still an hour before dark and I asked Smala to go to a nomad camp near by to see if we could get fresh animals there. He returned soon with another wild story:

The old headman at the tent village had not received him well; had asked why we came uninvited into his valley looking for trouble. He refused us animals, or any other help, and warned us against going any farther north. He said that the people in the mountains ahead were entirely savage and placed no value at all on human life. And by way of emphasis he added that in the summer they spent most of their time digging graves to take their dead in winter when the ground was frozen too hard for digging. He told us to go back to the place from which we came.

When this word reached our timorous camel drivers huddled about their fire, it was more than their thin nerves could stand, and again they came in a body to my tent with fresh imaginings and another ultimatum. They said that while Smala was gone they had seen men with rifles circling our camp, taking up positions for a night raid. And they stated again that this was the last night they would remain near Shaoz. They said that in the morning they would take us back the way we had come, or take us east to the Farrah Rud, or west to Sabzawar, but that they would not stay any longer here, nor go any farther north.

Without my knowledge then, Smala hired eight more men from another nomad camp to the east of us to guard us through the night; and when I turned in there were strange men all around us armed with knives and rifles. These men were the real thieves, wailed Nadir in the morning when he found his kitchen empty.

Buie and I conferred again on transport. Most of our energies were given to keeping our temperamental camel drivers happy, least to mapping geology. And we were forced to travel as they wished, not as the work demanded. The men said that there was little prospect of finding animals farther to the east, that the people there rode only donkeys and humpbacked cows. And they repeated again that they would not go with us farther than the Farrah Rud.

The idea of buying our own pack horses, therefore, was again tempting. Sabzawar, the only likely market, lay forty-five miles

westward across the desert. By fair riding we could make it in a day. Buie agreed to carry the work east as far as the drivers from Zarmardan would take him, while I rode to Sabzawar for horses. I would return then and follow on his trail.

Accordingly, on the morning of February 1st, Smala and Fierce Khan and I turned west on horses, while Buie and Nadir and Feeble Khan went east with camels.

Smala and I were fairly well mounted, but the soldier's horse was not so strong. Under the circumstances, since he could not keep pace with us anyway, I thought to increase his load with our blanket rolls; then we could ride freely ahead and he could follow leisurely on our trail as soon as we came to a path that I could trust him to follow. But the trail that we started on soon split into several branches, like goat paths, leading indefinitely to pastures; so we left the trails, and I set a compass course on Sabzawar, and we rode near together, except when I left the course to look at rock outcrops beside the way.

We were in a desert of long, smooth ridges of yellow shale, separated by considerable hollows and side defiles where a horseman, or an army, could drop from view and maneuver unseen from the general level of the plain. South of us towered the magnificent snow-topped limestone peak of Khwaja Sarbur, rising sharply from the low shale ridges. On the north the shale was bounded by a low, dark, serrate range of lava rock. Our course in the shale crossed hill and swale alike; so, unless we rode close together, we were not always in one another's view. The February breeze was gentle and undecided between warm and cold, and the sun was laughing bright, but too weak to dry the rain-beat surface—so our horses left no dust, and hardly any trail.

About noon I rode forward alone to take observations on the rock where it was well exposed on a hill crest several ridges forward. My two companions came on together more slowly. When I finished my notes they had not come up to me, and I waited, lunching on boiled mutton from my saddlebags. When they were still not in sight half an hour later, I rode back in search of them; but with two-thirds of the distance to Sabzawar still ahead I could not afford much backtracking, and when I did not meet their

trail where I expected it, I rode forward again to a high point and searched the plain with field glasses, hoping to see them cross a ridge.

There was a lone shepherd with a flock some miles ahead, and two nomad tent camps at the foot of the lava range, but nothing else moved in sight. Either they had deserted me, or they were lost themselves. In any case, they were keeping to the hollows and were out of sight.

I turned west again, keeping a sharp lookout from every ridge top—dejected, disappointed, lonely, feeling that I had been deliberately betrayed, but afraid to ride fast on Sabzawar lest I might be mistaken and outdistance them while they were in search of me. So I went on indecisively.

Later in the afternoon, clouds gathered around Khwaja Sarbur behind me, and the wind freshened in my face. The cloud area spread and absorbed the sun, and the temperature dropped sharply. The western horizon darkened, and the wind bore rain, first gently but then in heavy squalls. I cased my rifle and changed my course to make for the tent villages by the lava range. It was plain that a heavy storm was gathering, and I planned to shelter there, expecting that Smala would do the same. The villages were some miles to the north and near a course that I thought he might be following. I was thoroughly wet and stiff with cold, and frost was forming on my horse, before we came over a ridge in view of the black tent encampment. At sight of them my horse took fresh courage and galloped forward.

At the first tent a young man lifted the flap when I dismounted; but he guarded the opening against my entry, and other men inside shouted for me to be on my way. They said that they had seen no other horsemen, and there was no sign that other horses had been that way.

I rode to the next camp and met a similar reception.

The rain turned to heavy, sticky snow as I rode west again alone; soon the wind increased, tearing at us with icy claws; the snow came mixed with sleet driven in swirling sheets; and then the desert blizzard broke with all its sudden fury, smothering the landscape, smothering all near-by objects, smothering every-

thing with howling snow and darkness. I dismounted to keep from freezing in the saddle, and continued stumbling westward, steering by compass with the instrument held in fingers too stiff from cold to dampen the needle. With nothing left now save my horse and empty saddle, and no apparent hope of near relief, I became engrossed in little inconsequential details—counting the ice pellets that struck my eyes, the clumps of thorn we stumbled over, the ravines we blundered into. Once I bumped against a large boulder and noticed, where the snow had cracked away, that it was granite; so I knew that we had passed beyond the shaly plain. But there was still no trail, and still we stumbled blindly westward because Sabzawar was west of us and I knew we dare not stop.

Near evening, when the storm was passing and the darkness was lifting just a little, we came up with three camels loaded high with brushwood that their drivers had gathered in the desert for fuel before the storm swooped down and caught them. Like great prairie schooners, plastered thick and smooth with snow, they were moving tediously in our direction and we fell in behind them. The drivers, as thoroughly miserable as I, were not unfriendly; either they were of a different clan from the hostile shepherds behind us—they were too storm-battered to recognize—or men are drawn closer by the common bond of misery. I followed them to their tents, where one of their young men came barefoot through the snow and put me on a trail which he said would soon lead to a village.

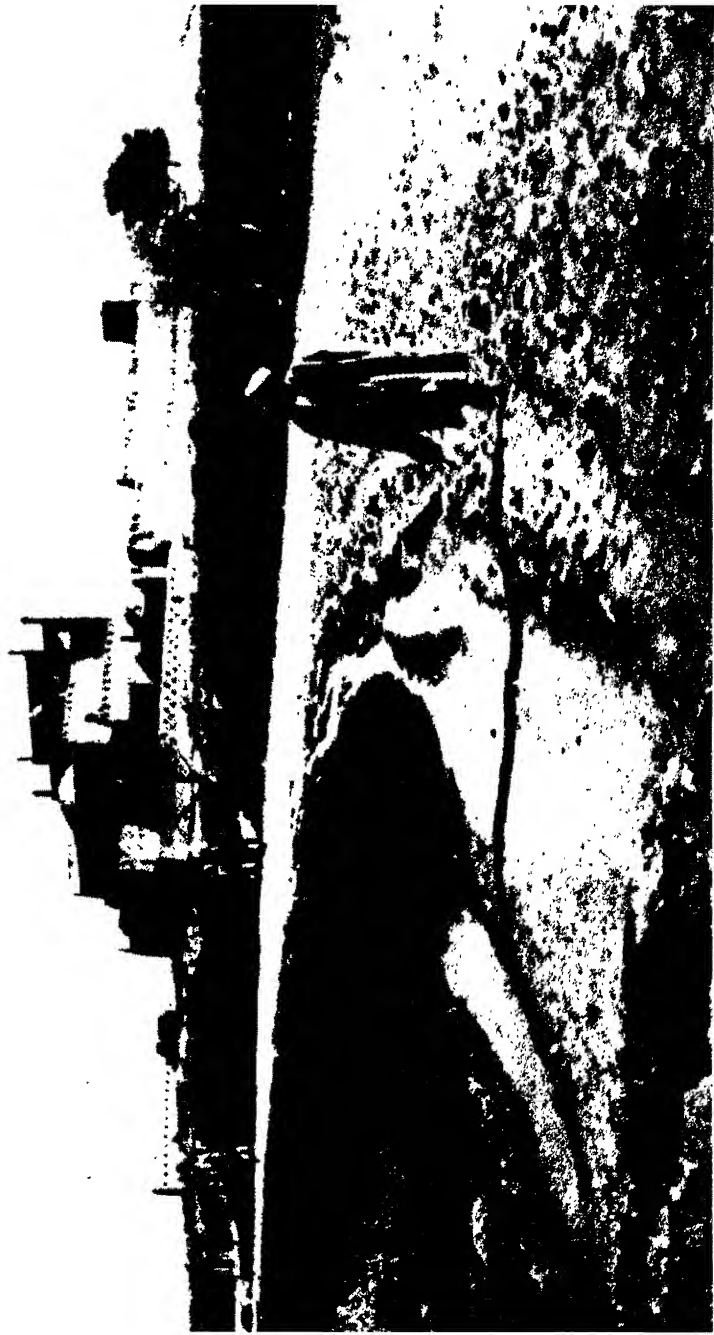
East of Sabzawar, on the east side of the Adraskand River, are many villages of solid Afghan mud. In the last of the stormy twilight I reached the first of these and again inquired the way, for there were gardens there and trails led everywhere. Unexpectedly again I met a friendly greeting. In answer to my call a young man came out to lead me on the trail; but when he had a closer look at my condition he suggested that I should stay with him until morning—a suggestion that I heartily accepted at once. He helped me dismount, for I had ridden again the last mile or so and was then solid in an armor of frozen snow, and too stiff with cold and damp to leave my horse. He gave

me the use of an empty hut, started a fire inside, spread felt on the bare ground, and brought hot tea. Other men came and cared for my horse, and brought my saddle into the hut.

When I again found use of myself I stripped my outer clothes (Afghan modesty would never permit one to strip completely in a group of other men) and dried beside the fire. By then half the men from the village were gathered with me inside the hut. They asked many questions, being unable to understand how a lone foreigner could come out of the storm to them from the east. They examined my Indian army saddle (unlike the high, stiff saddles that they use), and my field glasses, my watch, and my compass, passing each of the smaller articles from hand to hand for close examination. The young fellows in the crowd were in a light mood and made jokes of everything. Others asked for medicine to heal their chapped feet, and when I was well thawed I doctored them with iodine and bandage from my saddlebags. Then some of them wanted me to fix their teeth.

Later they made a feast of steamed rice, fresh bread, and more hot tea, and we all filled ourselves and relaxed in the common bond of satisfied well-being. The evening ripened well, with more jesting, and songs from two high-spirited lads who undertook to entertain the rest of us. With their final exhaustion, my original host brought more felt pads and quilts, bedding for himself and me and one other man whom he invited to remain with us. And soon after, when the hut was quiet, I passed to sleep with a whispered blessing on the Sheendan village people—although a little later I awoke with lice crawling over me from the quilts and wondered why I was leading such a life.

Dawn brought a breakfast of fresh eggs poached in sugared ghee, and more bread and tea, and again the men all assembled to eat together. They were still in a holiday mood, and we all had a joke on a young mullah—who, I believe, was a bit jealous that I was getting all the attention. When the breakfast was finished, my host asked for a letter recommending him to the governor for the service he had rendered me. I readily agreed, but of course wrote in English, which, compared with Persian, is written backwards. The letter was at once handed to the mullah



MOSQUE OUTSIDE HERAT



A SOLDIER STOPS TO SMOKE HIS PIPE

to translate, since the mullahs are usually the only literate men in the village (Afghan mullahs are mostly schooled in Persian, some in Persian and Pushtu, none in English). He tried vainly for a while to make sense of it, and then, recalling that he had seen me writing backwards, held it to the light and tried to read the reversed image through the paper. This reaction was perfectly intelligent, but the thoughtless crowd roared with spontaneous laughter, and the puzzled mullah handed the letter back to me with some displeasure. I told them to take it to the governor, who would have an interpreter.

Without more delay, I saddled my horse with the hindering aid of every one present and made ready to leave. My host came with me, riding behind my saddle, to the governor's place in Sabzawar.

There I explained what had happened, and a detail of soldiers was detached to find Smala and Fierce Khan. But before it could have gone far Smala rode in alone, and later Fierce Khan came too. Smala said that they had had much trouble, that they were lost in the storm, that the soldier's horse had failed, that he, himself, had carried all the soldier's loads, and that they had spent the night unsheltered on the desert with a shepherd. But he and his horse were fresh and clean and dry, and when Fierce Khan appeared he was carrying all the loads and both he and his horse were caked in mud and near exhaustion. So I thought it best not to question Smala too closely.

Without delay, we sent out word that we wanted to buy horses, and through the aid of the governor's secretary we were able the first evening to select provisionally, from the many unfit animals offered, two that appeared strong enough to stand a journey.

Next morning the secretary, glad for the excuse to leave his desk, rode with me to try the new mounts, and to look for others among the villages in the valley, while I left Smala to negotiate a loan of 3,000 afghanies (about \$300) to finance our deals—this being work distinctly more to his liking than his recent duties.¹

¹ To their credit, it should be recorded that the officials at Sabzawar, by permission of the High Governor of Herat, granted this loan without question of security, or interest, or commission, on a verbal promise that I would repay it in Kabul at my convenience several months later.

We rode easily through the cultivated lands east of the river, stopping in one village with a mullah for a lunch of eggs and onions cooked together in ghee, bread, and cold curd, and at another place for pleasant conversation with an old village chief. We found no horses for sale; but we did find men sufficiently considerate to be interested in helping us, and their suggestions brought fruit later.

These village people are vastly different from the stupid, sullen desert folk a day's ride east. Physically they are large, well built, splendid individuals. They are friendly and hospitable, and cultivated in a rustic way, and their leaders are alert to the world beyond their valley. During our long talk with the old chief his interest led largely to questions regarding ways of life outside, and he remarked that he wished I might take his son with me to a school in America.

The desert people have no such graces. To them the name "America" conveyed no meaning. They are ignorant of all things outside their little pasture, are stubborn, suspicious, unfriendly, and sometimes hostile even to other factions of their own clan. They live only in the black, homespun, woollen tents used by all Asiatic desert dwellers, and their donkeys and camels share their tents with them. Their women are unveiled and less restricted than most village women. Locally they are referred to as nomads; but probably they are only seminomadic, for I noticed that each tent village had a comparatively large cemetery, indicating that they must occupy the same location much of the time. Actually, like all the Afghan nomads, they are shepherds; but being far south on the edge of the desert, and also at the very foot of mountains affording considerable high pasturage, their range is limited. Physically they are lean and wiry, with thin underdeveloped beards, but fairly heavy hair which they permit to grow long and hang unkempt.

On February 4th, I bought the two horses that I had tried the day before, and also two others that had come up for sale in the meantime. The prize of the four animals was a little dapple-gray, short-coupled, deep-chested, well muscled mountain stallion answering to the English name of *Barney*. Barney had alert ears

and expressive eyes that spoke understandingly to a foreigner, and I selected him at once for my own mount. (We soon became inseparable and thereafter remained together until I left Afghanistan.) The other horses were moderately good pack animals.

Some of these horses were purchased without pack saddles or blankets, which was a mistake. For in Afghanistan such articles cannot be found for sale in the bazaars. Each man makes his own as needed. In Sabzawar I got them with the aid of the governor's secretary; he forcefully requisitioned them from passing horsemen whom I then compensated with cash.

In the meantime, on our second evening in Sabzawar, Smala had come to me with the request that he be granted "leave of absence," saying that his brother in Kabul was very ill, and that he wanted to hurry there and take him to India for treatment. Again I had no heart to question Smala's story. He was city-bred (from Kabul), of a good family, and had been trained to an easier life than we were leading. He had no liking for the hardships and uncertainties of the trail, and for some time he had been unhappy with me, and had protested my continual drive on in the face of winter weather and reported bandit ambushes. The bandit stories, in particular, had very much frightened him. So I paid out his full wage and agreed to what he wanted. He immediately engaged a seat on a southbound lorry, and was gone before I got my new horses out of Sabzawar. Later, I learned that he had gone only as far as Farrah, where he spent a week vacationing with the local governor, and then had returned to Herat and taken a position as English tutor in a wealthy Afghan family there.

Fierce Khan also left me in Sabzawar, but for more legitimate reasons. He said that he was out of his district and should return to his own post. Actually he was under orders to remain with me; but he was as unhappy as Smala in winter campaigning, and I agreed easily to his release, knowing that I could get better men in Sabzawar.

By the morning of the 5th I was ready to start east again. The Sabzawar garrison had furnished me with two mounted troopers, and I had hired one servant to help us look after the horses. As

usual, with new men and new gear, it was noon before we were finally settled down to steady going on the trail. First our new stallions, all strangers, fought one another before we were out of Sabzawar, and I found that we were inadequate to cope with them. The party then consisted of four mounted men and four unmounted pack horses carrying our blankets and a little food. I had anticipated (on the basis of some previous American cavalry experience) that four mounted men could handle four unmounted horses. But the Afghan troopers with me took the position that they were guards, and guards only, so that my one additional man was insufficient.

I asked the troopers to find another servant, whereupon they merely called the nearest bystander on the street and found a willing recruit, a young fellow who excitedly shook hands with his pals, mounted one of our horses, and said that he was ready to go. He brought neither coat nor baggage, the sun at that moment being warm and bright.

All these men were good men. By evening we had ridden thirty miles on a trail that bears southeasterly to the tent village of Chah-i-Jahan. Near this place we picketed our horses under a sheltering bank by a desert water hole, and slept together on the ground around a fire beneath the bright, clear wintry sky.

We were riding early again in the frosty morning, and soon had passed the dead fires of our Shaoz camp. From there our trail bore northeasterly through higher country, where the open desert plain of yellow shale gave way to barren volcanic rocks, deeply incised with dry ravines, like bad-land country, and on the south, all along the way, the grand, snow-covered Koh-i-Besha range leaned over us, lifting some of the icy northeast wind that came pouring down the valley.

We kept the pack horses moving fast all day, and in the evening again we slept in the open near another tent village by a stream of clear snow water. We chose these tent villages for camping sites because the country was too barren to furnish firewood, and the villagers always had some which the troopers commandeered.

The third day saw us riding into still higher, rougher country

where the volcanics were uncovered and the yellow shale outcropped again to form a sharp divide. From there our trail led eastward, down into the valley of the Farrah Rud, the river we had left at Daulatobod. In the afternoon, where the trail was not too rocky, we noted the tracks of Buie's camels, and in the evening we came to the camp where he had stopped the day before.

All day again we had ridden in the face of an icy northeast wind that drained all warmth from the wintry sun; but by evening it was quiet, and there was overcast, indicating rain. The troopers requested the shelter of a nomad's tent, and we all crowded in with the original occupants and their donkeys, and a smudge that filled the place with smoke down to the level of an open flap that drained it out. In the night, when the flap was lowered, the smoke level lowered too and the men lay flat on the ground to breathe—and sleep.

Next morning we crossed the Farrah Rud several miles above its junction with the Tagao Ghor, one of the main upper tributaries of the Farrah from the east, and the stream that lends its name to all the district near its head. The Farrah there is in a narrow rocky channel, and there is a barren, ragged little divide in the interconfluence area, but the Tagao Ghor has formed a wider valley where we found pleasant fields under winter cultivation, and friendly farmers living in adobe villages.

In the early afternoon we overtook Buie's slow-moving camels near one of these larger villages called Nizgan. Nadir was in charge. Buie joined us later, and we camped; and during the next day we rested our horses and compared notes.

Of our original party from Farrah only Nadir remained. The camel men from Zarmardan, who had promised to go east to the Farrah Rud with Buie, had funk'd the first day out and turned back a short distance east of Shaoz, still fearful of bandits and bad trails. Feeble Khan, the soldier guide, had also deserted and turned back. Buie had found sturdier men among the tent villages west of the river who had carried him to the Tagao Ghor, and among the villages below Nizgan he had enlisted other steady, reliable men who were still with him.

One more day of easy riding brought us by evening to Par-

jaman, a small village on the southern branch of the Tagao Ghor, and the first administrative post east of Sabzawar. Buie, the two troopers from Sabzawar, and I arrived ahead of our camels and surprised the hakim, who had had no previous word of us. We were received kindly, and furnished billets in another medieval setting, like Anjuman in Badakhshan.

Of the few habitations between Shaoz and the Farrah Rud, all were temporary tent encampments. There were some tent dwellers also among the more permanent adobe villages near Nizgan. We found Parjaman, on the other hand, entirely solid, like a pueblo village, with square flat-topped rooms built together, the inner structures being higher and arranged so that the lower floors face an inner court, while the upper floors face out onto the roofs of the surrounding lower rooms. The roofs are of mud spread on a mat of thin poplar poles. The walls are of adobe brick, so thick that the covered entrance is like a tunnel. The inner court accommodates the animals, and kettlelike feed basins for grain are built into the thick mud walls. As such, Parjaman is distinctly a mountain village—and it was also once a main fortress of the old Ghorī kingdom. A large adobe-brick mosque, with two unusual towers and domes, standing alone on a desolate slope near the village, still lends more than local importance to the place.

While the Parjaman men unsaddled our animals and stabled them inside the court, we took food with the hakim and his mullah in one of the upper, carpeted rooms, answering many questions about ourselves in explanation of our visit. Later we were given billets in one of the lower halls facing onto the inner court, where there was a good fireplace for warmth and cooking. Here we remained for two days, while it rained in the valley and snowed more on the surrounding mountains and cliffs above the village.

During this time, the villagers butchered a large quantity of beef. The docile cattle were herded outside the village walls; there, one by one, they were thrown, their legs were bound, and their throats cut, while the remaining animals stood meekly

awaiting their turn to be slaughtered. This was the first beef that I had seen killed in this land of sheep and goats.

During this time also, the Sabzawar troopers turned back, their mission accomplished. And as Parjaman is the end of the camel trails from the east, the Nizgan camel men went back with them. All other trails leading out of Parjaman are too rough in winter for any but horses or donkeys. On the south, almost overhanging the valley, the Koh-i-Kaisar rises in cliffs over 8,000 feet above the village; and this range extends northeast for more than twenty miles as a great barrier wall of snow-covered, limestone cliffs, ending finally in the 13,600 feet peak of Jam Kala. To the north and east the yellow shale (first encountered at Shaoz) forms low, rough country between the Tagao Ghor and its southern tributary which flows past Parjaman. From Parjaman one trail runs north across these low shale hills, and on over the higher mountains that lie beyond, to a place called Tulak, and then on to the Hari Rud and down to Herat. Another trail leads northeast to Taiwara, in the district sometimes known as Taimani, but better known locally as Ghor, after the ancient kingdom that once centered here. Taiwara is the next administrative post to the eastward, and the present seat of the old realm of Ghor. It is situated on the western edge of the Hazarajat, that little known central Afghan mountain fastness which is the home of the isolated Hazara Mongols.

In my search of the provincial archives for mineral reports I had come on mention of mines near both Tulak and Taiwara, and our effort this far had been not only to sketch a geological cross-section, but also to reach these places. Now it was clear that Tulak was much more accessible from the north, through the valley of the Tagao Haft Kala, a southern tributary of the Hari Rud that can be entered easily from Herat. Accordingly, Taiwara alone became our next objective.

We left Parjaman on February 13th, with a dismounted soldier guide, two new men for the pack animals, and fresh provisions. Although we were living largely off the country, we usually carried extra provisions for a day or two, taking whatever was

available where we stopped. This day we took bread, chickens (which we cooked before leaving), dried figs, pomegranates, and barley grain for the horses.

Four days later we were in Taiwara, having travelled eastward for one day up the valley of the Parjaman toward the icy, snow- and cloud-shrouded peak of Jam Kala; then, as if in retreat from the mountain's deathly stare, northward for two days over the hills to the river Ghor; then on for one day up the Ghor. At nights we billeted in bleak little isolated villages by the way, like those described so often before, where we were always received with solemn respect and overwhelming curiosity.

During the first day of this journey we were on rough trails of wet shale, where our horses slipped and fell on the slimy surfaces. One slid into a deep hole at a river crossing and was carried under water by its load; another slipped over the edge of a twenty-foot bank and fell to a ledge below; others had many minor falls, but all were rescued.

During most of the second day our smooth-shod mounts either slipped recklessly about on frozen snow, or made music on frozen ground; although by evening we had climbed well above snow line. This night we took shelter at a little group of huts called Mula Kala, where Nadir obtained more barley straw and grain for the horses, and a goat for ourselves.

On the third dawn the mercury stood at 7° Fahrenheit and we waited for the sun to soften the hard snow surface before leading out the horses. Our way then led over a 9,000-foot pass (from 4,800 feet at Parjaman), and then down north drainage to the village of Waras on the Tagao Ghor. This trail down the north slope was not reassuring, for with each mile forward the depth of snow increased to plague the horses, and the wintry afternoon brought fresh snow flurries and then a drop in temperature that soon formed an aggravating crust only half strong enough to support our dismounted men. Some of the men went barefoot so as to better spread their weight, but the thin crust only teased them, breaking at every second step or so, until their chapped soles soon left bloody footprints in the snow. At Waras, in the evening, we again found solid shelter in some empty huts

where there was a little fuel to fry our goat meat and make a smudge to sleep by.

Most of the hilly trail behind us was desolate and barren of habitation, but at Waras there was evidence, in the smooth snow fields, of cultivated lands beneath the snow, and the promise of more hospitable trails ahead. Only the weather held cold to chill our full endeavor.

On February 16th it was -3° in the fresh morning sun. Our drawing inks were frozen solid inside a pannier in the hut, the Tagao Ghor was frozen over, and a rigid crust was on the drifts. Buie and I rode out early, the soldiers followed, and soon came the pack train, with the horses silhouetted black against the snow, walking safely on the crusted surface. At the river ford there was some trouble, where fickle ice held up our unmounted saddle horses but broke under the loaded animals, until we cleared a lane through the jagged cakes of ice and drove them through the icy water.

Above Waras a chain of small villages links the valley in one community, and we progressed easily on to Taiwara.

Our guides had never seen Taiwara; they knew of the place as a midwestern farm boy knows about Chicago, although he may never have been there. And as he might do with inquisitive strangers, they had described it in glowing terms to us on the lonely march from Parjaman. Together we deceived ourselves that we were riding on a rich metropolis, with a full bazaar, and intriguing gardens. When we came over the last dreary rise the Taiwara we saw was all but that. Ahead of us in the broad, dreary valley was an immense, square, robat-like fortress, replete with a tower at each corner and in the center of each massive wall, standing alone there on the snowbound plain. A few humble huts nestled near the hills beyond, and some lean trees farther up the valley indicated dwellings there.

We sent a trooper ahead to inform the hakim of our coming, and then assembled our stragglers and rode together to the main entrance of the fort, a great wood gate in disrepair with age.

The hakim's retainers admitted us with little questioning, for

it was too cold to stand long in parley, and we were too few and strange to arouse more than curiosity.

Inside, the great old walls harbored the official community of Taiwara, the hakim, a moderate garrison, and also a few tradespeople who kept several open shops. These were the great bazaar that we had been told about. The general unkempt state of things within was in keeping with the outer decayed appearance of the fort, and disheartening after our high expectancy. The walls and rooms were crumbling, and the court littered with weathered debris and the accumulated rubbish of a snowbound winter camp.

This was the heart of Ghor, which has twice stood high in Asiatic power. From here in the early twelfth century old Malik 'Izzuddin al Hosain, "the Father of Kings," gained predominance over all the local country. His sons conquered Ghazni, and their nephews extended the conquests from the extremity of India to Babylonia, and from the Oxus to the Strait of Hormuz. After the Mongol flood washed all this power away, Ghor rose again in the fourteenth century, under the dynasty of Kurt, and governed all the provinces from Merv to the Indus River, including all of Seistan and the Khyber region and the city of Kabul. Later, when the Mongols again looked with disfavor on this rising power, Kurt's son withdrew into Ghor and abode in his strong fortress of Kaissar. The power then faded, and the energy to revive it has never come again. We see Ghor now as a third-rate hakim's post administered from Kabul. And, reminiscent of the long dead past, the Mongol Hazara neighbors on the east still are stronger than the small hill fortresses of Ghor.

The hakim, a pompous little civil servant, was incredulous that we had come at this season to examine for mines. While we stood in the court stamping on the frozen snow, with our frosty horses exhaling clouds of congealed breath and champing impatiently for the removal of their cold steel bits, it was hard for us to say that there was a reason for it. Later, in his rooms (which were unheated, and nearly as cold as the court outside), we tried to explain that even in snowy February it was still possible to map a reasonably complete cross-section of the rocks, and that we

couldn't be everywhere in Afghanistan at the favorable season. But he remained fully unconvinced, and his one answer to all our explanations and questions was: "Barf, barf, barf"! ¹

He professed to know nothing of the reported mineral deposits near Taiwara, but when confronted with copies of the written reports, recalled doubtfully that they were near a village named Seb Talkh, one day's ride up the Seb Talkh River, a north tributary of the Tagao Ghor that joined it near Waras. He called in a man who claimed to know about the reported deposit, but the fellow flatly refused to make the trip with us in view of the cold and snow. The governor's sound advice was for us to return the way we had come before more *barf* blocked that trail too and held us there till spring.

It was a pretty hopeless situation, but I was not yet willing to turn back. There was, actually, quite a little work to do where we were, where new formations of volcanics and red beds outcropped through the snow in an open syncline in the valley between the older limestone mountain walls. So Buie and I decided to make the best of it and to spend at least a day or two exploring these new formations.

On the 17th, therefore, we went out on separate trails to do geology, Buie heading toward the northern valley wall, and I toward the southern, while a soldier was detailed to follow each of us.

The temperature had moderated, and the cloudy morning brought fresh snow flurries that masked all but the nearest hills; but the old snow was still firm, and we walked easily over the surface. By noon, after I had gained the contact between the young volcanics and the limestone, the weather cleared, and the sun with resurgent warmth made conquest of the snow. The old surface softened, and it was a struggle to return the way we had come. Every step forward let us down thigh-deep in snow that dragged like quicksand. The white sun glare from the new snow was maddening, and there was no escape from it; by evening, after we had regained the fort exhausted, my eyes rebelled in blindness that induced fever.

¹ Snow, snow, snow.

So many times in the past our Afghan advisers had insisted that our contemplated program was impossible before we accomplished it, that I had become generally skeptical of all such advice. This was the case again now in Taiwara. The hakim insisted that the only trail still passable from Ghor was the one we had come over. Had we not already demonstrated that it was passable he probably would have classed it as impassable too. Consequently we did not immediately accept his verdict regarding trails, but spent some time studying our maps and asking indirect questions regarding the districts ahead.

Taiwara stands at the crossing of two main trails; in other words, four trails lead out from the place. One of these is the road by which we had come from Parjaman. This continues northeast, eventually again reaching the upper valley of the Farrah Rud and following this into the Chakhcharan, a mountainous district north of the Hazarajat in the very heart of Afghanistan. It there joins the main trail running east-west between Herat and Kabul. Another trail runs north from Taiwara, skirting the great mountain peak of Chalap Dalan (12,700 feet), and continuing northward to connect with other interior routes. Both of these ways, leading into higher country, were then probably very difficult. The only other way out is by a southeastern trail that crosses the mountains south of Taiwara by high passes (10,000 feet) to the headwaters of the Khash Rud, and then swings southwest and south into Gulistan, a foothills province between the mountains and the desert. This route was worth closer study because we wished to take our geological sections southward, and also because it led to lower country beyond the mountains. It was also attractive because an alternative route leads south from Waras to join the Gulistan trail south of the mountains. Possibly if one was blocked the other would be open.

On the 18th Buie and I rode out to see what the trail was like beyond the abrupt foot of the limestone mountains. We found that it led up a narrow ravine, where a stream cut the rock like a saber gash; that it was deep in snow, but that there had been travel over it. We rode on a few miles and then met foot travellers who reported that horses could never cross the pass. These people

never use skis or snowshoes, and contrary to their views I reasoned that wherever a man could walk I could ride or lead a horse. But my reasoning met with no support among the men, and after a while my eyes, still supersensitive to light, began to fail again, and we turned back.

Back in the fort that evening we discussed the question further with the hakim. I insisted that if men could cross the mountain trail on foot we could cross with horses. But the governor quickly added a new flavor to the conference by stating that if advising did no good he would forbid us to travel by that road. He said that, even if we did cross the pass, there were many other passes beyond, that the country south of the mountains was entirely barren and inhospitable, and that he could not risk our safety there. He did state that by the trail south from Waras we could reach some high villages, but indicated that beyond them we could not go.

One engaged in exploration never likes to backtrack—new trails and new horizons lure irresistibly—and if one never went on in the face of odds no exploration would ever be accomplished. On the other hand, more is sometimes gained by temporary retreats. So Buie and I reviewed the problem again in our rooms alone, and we struck a compromise. I still had in mind the reported mineral deposits at Seb Talkh, and even though guides refused to go there with me I wanted at least to get an impression of the general geological environment of the Seb Talkh valley. I would take the four strongest horses, finish the Seb Talkh examination, and then try to force the passes south from Waras. If I got through I would continue south through Gulistan and make for the desert highway at Girishk. If I failed to get through I would retreat to Farrah by the way we had come. In the meantime, Buie would retreat at once to Nizgan and, from there, attempt to traverse the gorge of the Farrah Rud south between the Koh-i-Besha and the Koh-i-Kaisar. His destination would be Farrah. He would then have the motorcar and could come to Girishk to meet me. This plan was accepted, and we at once set about dividing our kit and provisions. We kept the full details of our plan from the governor, to avoid his certain veto.

The morning of the 19th dawned muggy and dark, turning the valley trail to slush and mud while fresh snow fell on the higher mountains. By evening, however, snowfall was general again, and the air was colder. Buie and I moved back to Waras. Four troopers from Taiwara were detailed with us.

We parted next day at the mouth of the Seb Talkh River; I took Nadir and two men from Taiwara and four horses. Nadir and I were both mounted; the other two horses, led by the Taiwara men, carried our packs. Two of the mounted troopers also came with us; but, like most of these fellows, they only ornamented our party, for I could get more information from my map than from them, and could better judge the condition of the trail ahead than they knew it; and neither of them was ever of any other assistance on the trail.

Buie took the rest of the outfit back over the Parjaman trail.

An hour later, however, Buie rejoined me for a few moments in search of his dog, which had followed my men. In Taiwara he had photographed the commandant of the garrison and in return was given a fine Afghan hound—a beautiful, shaggy white dog with black nose and eyes, built like a whippet, and as alert and lithe as an impala. This was a handsome gift, and one worth returning for, for dogs rank high in the lives of the Afghans. Most of the Afghans' dogs, however, are not Afghan hounds, but rather heavy animals, with heavy jaws and curled-up tails, in appearance like a cross between a St. Bernard and a Husky sled dog. The village people use them for watchdogs, and the nomads use them for shepherds: they serve well in both roles, it being quite impossible to approach a village, a nomads' camp, or a herd of sheep at any time of day or night without their aggressive challenge; and if there are more than two of them together they often attack a man on horseback. By comparison, Buie's Afghan hound was rather a regal pet, a frail, timid, sensitive, fickle animal who went with any one who gave him some attention without giving much in return.

After we finally parted, Nadir and I led our party up the Seb Talkh River to the village of Seb Talkh. Snow had fallen again through the night, and morning had brought another thaw that

took out the river ice and drew a flood of muddy water down the stream. This largely defeated the purpose of my traverse, for one of the best ways to get a first impression of the geology in country ahead is to observe the rock brought down by streams, and now everything was under either snow or muddy water. Before the day was out, however, we entered rougher terrain again, where black slate ledges, cut by many barren calcite veins, stood too steeply to hold the snow and so were well exposed.

We found Seb Talkh village another little group of adobe huts buried in the hills. Nadir arranged a room for me and another for the rest of the party, and we picketed our horses in the lee of the huts, moving them as the wind shifted from one direction to another. As I had learned to expect, the villagers claimed no knowledge of mines or minerals, although they seemed pleased enough for the midwinter diversion of strange men in their midst.

The following day brought another wintry blast, with heavy snow driving in obliquely from the east, like those late March blizzards that sweep the prairie states at home and break down the last dead cornstalks and drive the cattle deeper into their sheltering strawstacks. Sifting through the smoke hole in my hut, it awoke me in the early morning. It continued heavy until noon, when there was a lull and I ventured out to chip some rocks; but the lull only marked the center of the storm, for shortly the wind shifted to the west and the snow came thick again. I returned to my solitary hut to study maps and a Persian dictionary, my two remaining means of communion with the country.

The snow continued all that night; but it cleared early the following day, and by noon the sun was warm again. With the passing of the storm the village men turned out in force and cleaned the tops of their flat-roofed huts of snow to keep the melt from soaking through. Still intent on geology I floundered through the wet drifts, now waist-deep, to the nearest rise of land for further observations on the rocks, and to determine our map position better. One of the troopers, obeying to the letter his orders not to leave me, came along also with his heavy old falling-block Enfield rifle and swore vehemently at my foolishness. But our efforts brought small returns, and we soon retracked

and sat with the others in the sun on the hut top, where in lazy ease I contemplated the snowbound village, the unbroken trail leading down the valley, and the snow-crested hills all around us—wondering whether Buie had crossed the high country on the Parjaman trail ahead of the recent storms, and trying to picture what the higher mountain passes south of Waras must now be like.

The prospects for my journey out of Ghor now seemed very gloomy indeed. Under the circumstances, I knew that I could not hire local men to go with me. Only one fact stood strongly in my favor; I owned my own transport and at least could try to break the trail alone with Nadir. Snow would be my main adversary. And so, to begin the conquest, I climbed down from my musing tower and cut some poplar branches from the brush along the stream, and then spent most of the night fashioning a pair of snowshoes with leather thongs from my saddle harness.



THE AUTHOR'S CARAVAN BETWEEN SHAOZ AND PARJAMAN



THE AUTHOR EN ROUTE TO GHOR

CHAPTER IX

FROM GHOR THROUGH GULISTAN

WE HAD been told so often by the governor and soldiers in Taiwara that it was impossible to cross the mountains from Ghor to Gulistan, in winter, and the recent snowstorms added so much weight to what they said, that our journey became a real adventure before we started.

Our first day's march was easy. On February 23rd we moved from Seb Talkh back to Waras, and then continued south over a low divide on the east flank of the mountain Lajar, a great limestone outlier on the yellow shale that forms the valley. Beyond the pass we came down onto the headwaters of the south fork of the Tagao Ghor which flows past Parjaman. There we found an open valley and a village where a kindly old mullah made us welcome.

For a mile on the north side of the pass the snow lay thick and even, like cotton batting spread firmly on the gentle slopes, and our lead horses were taxed to open a trail for the packs to follow; but along most of the route the depth of snow was less, so that we could step forward without too much heart pounding.

In the early twilight, while Nadir cooked mutton for our communal meal, I tested my new snowshoes on a hike over the drifts north to the nearest rock outcrops. The old mullah, whose sedentary life seldom led him farther than the mosque, laughed with high good humor when he saw my crude webbed feet; but the young soldier, who on two previous occasions had hiked with me through snow over our depth, passed tacit approval; the other men accepted them as they accepted me—as something just a bit peculiar which was not for them to judge.

In the morning we continued down the valley past the village

of Ana to the mouth of an east tributary where the trail forks, one branch running down the main valley to Parjaman, the other striking south over the hills to the village of Zirni, east of Jam Kala. We took the hill trail and reached Zirni by evening. All day the sun was warm, and we rode in the face of a south wind that carried a promise of spring. A little beyond Ana we passed out of the snow at an elevation 6,200 feet below the summit of Jam Kala, 4,700 feet under Lajar. Then we entered again into country of barren yellow shale, where a swarm of black dikes strikes southwest toward Parjaman.

All along the trail from the valley of the Tagao Ghor we passed ruined towers attesting the former greatness of Ghor. They are particularly numerous near the village of Ana. Some are still intact; others, crumbling ruins. Some are circular; others, square. Most of them are, or have been, several stories high. Most of them are made of sun-dried brick in the lower part, with adobe walls above. In some the bricks have been laid to form various designs. None of them is at present in use. All were of better construction than the present village dwellings.

All along the way too, I had evidence that the ancient greatness of Ghor will not return with this generation. That is, if the fidelity of my soldier guide bore evidence. On the previous day north of Lajar Pass he had warned me emphatically that we could never cross because of the snow. After we had crossed, and I told him that I wanted to go on to Ana, he said in the first village where we stopped that it was Ana. We passed the real Ana next morning. At the fork in the trail below Ana, I wanted to ride to Zirni; he insisted that we should take the right fork, when it was plain that the left fork was the correct trail. When I followed the left fork and later came to a village he announced we were in Zirni, though the real Zirni was five miles farther on, as I found when I led the party there. Two things, I think, prompted his behavior. One was simply his desire to avoid the work of travel. He wanted to cut the day's march short and spend more time in the villages. The other undoubtedly was an attempt to steer me unwittingly back to Parjaman, as the governor at Taiwara had directed. For our easy days by no means lessened the cer-

tainty of grief ahead. The mountain barrier between us and Gulistan still lay before us—a barrier that was a constant challenge as we marched along the easy trail, except when in some deep gulch the horizon was not in view. We reached the very foot of it at Zirni, a black rock wall of solid limestone cliffs too steep to hold the snow that glistened white on the receding slopes above and faded in the clouds that always gathered there. At sight of them my conviction of a passage changed to hope, and doubt entered again to promote adventure.

At Zirni, as at all other villages in Ghor, we were received kindly and given a good billet for the night. Our horses were stabled under roof, and we were let a large room for the party. It was solid and tight, with a wall fireplace and chimney (a luxury), although while I was busy with the horses the men built a roaring fire in the center of the clay floor, as is their custom, and there was the usual atmosphere of thick smoke when I entered.

I rested the pack horses in Zirni for a day while I rode circuit from the village to sketch geology. My animals had tender backs that I foresaw would take nursing to avoid open sores. The large heavy felt Afghan pack saddles, after long use, almost always cause sores if left to native drivers. Partly this is due to their construction, which throws too much weight over the withers, causing soreness there; but mainly it comes from the reluctance of the men to unsaddle and blanket at night and let free circulation rejuvenate the deadened tissues of the back, which otherwise breaks out later in sores.

I rode to the foot of the cliffs, and part way up the trail I hoped to follow, and to the near village of Nile. Nile, Zirni, Ana, Parjaman, Seb Talkh, Mula Kala—all were once outposts of the inner fastness of Ghor. All are now much alike. The rocks in the valley, the confusion of limestones around the valley, and the trail leading out of it were my interests then, rather than the villages. I rode easily, sparing my horse, trying to read only the chapter headings of the detailed story written in the rocks. In the late afternoon another sudden squall stopped my browsing and sent me back to Zirni. It drenched my woollen poncho (made

from a blanket when I had discarded my oilskin slicker as too cold and ineffectual), and chilled my horse, and then passed as suddenly as it came, leaving the washed sun fresh on the distant mountaintops, and a few furry clouds racing between the crags to overtake the storm before the soft darkness of night settled on the valley.

We began our climb over the mountains next morning through the little terraced wheat fields above Zirni, then up a small valley outflanking Jam Kala from the south, by a good trail leading to a small village up near snow line. From there the trail ahead was unbroken, and apparently had not been used since the previous summer.

The sun turned burning-hot, and the snow was heavy with water. Isolated drifts, shoulder-deep on the horses, blocked the trail in many places. My snowshoes would have carried me easily over the surface, but it took hours to get the horses through. In other sheltered places that caught the direct rays of the sun, the snow was gone, and the mountain side was a creeping mass of mud and rock saturated with the melt-water. These stretches offered no solid footing, and caved under the horses, throwing them off balance, and causing many falls.

By late afternoon we were over the first pass (Kotel-i-Farangi) and on south drainage, where the trail led down a canyon through massive limestone. This narrow, dark passage was choked with frozen snow, with the full stream flowing in a cavern underneath. We dared not risk the horses there, and left the trail to follow the rocky ledges above. But these led again onto creeping slopes which were set in motion under our weight, so that we slid unwillingly back down into the canyon.

The Taiwara trooper with me, frustrated in his attempt to turn me back as each new obstacle confronted us, was sullen and angry at our predicament. We were riding some distance ahead of the pack train. Night was falling, and they still had the slippery slope to cross. I wanted to wait for them, but he wanted to go on, saying that there must be a village near. We went on some little distance farther to where the limestone ended and the trail switched up a steel slope of black slate. I knew that the pack horses

could never make the climb even in daylight, and so I stopped. But he went on alone.

Cold, pitch-black night sealed the canyon before Nadir and the horsemen, worn and hurt, came up to me. Together we unpacked the loads and spread a canvas under an overhanging ledge of slate, for there was not room between the rock and the roaring stream to pitch a tent. Then we made a great fire of driftwood to cheer ourselves, and a little fire by which to cook.

While we were eating together the sound of voices came from the rocks above, and soon twelve young men appeared in our fire-light. They were friendly, and squatted in a circle around the blaze, passing greetings with my men. They said that our soldier had reached their village and sent them back to help us.

These men were different in appearance from the men of Ghor. They were clothed in shapeless, homespun, woollen rags, with strips of woollen cloth wrapped around their legs like spiral puttees. They wore soft, dry-tanned moccasins, enormous turbans which covered their heads and extended in loose loops, like mufflers, around their necks, giving their beardless faces the appearance of excessive leanness. Their skin was dark and smooth, and long, straight black hair hung down their backs, increasing their dusky complexion.

They remained the night with us, sitting by the fire, eating, talking excitedly, while the leaping flames played on the animated group, cast restless shadows on the overhanging rock above us, and outlined the horses against the blackness beyond, giving our bivouac all the aspects of some prehistoric camp.

When daylight came we carried our loads up the snowy switch-back out of the canyon, and then led up the horses, one by one, with empty saddles. Over the ridge in the next valley we found the village of the men with the large turbans, a place called Bazdari. From there we had an easy trail, mostly free of snow, leading through black slate to the village of Tajwin, where we spent the next night.

Tajwin is a mixed village of tents and huts, with a few cows and horses running with the black goats common to these districts. They grow corn and eat corn bread instead of the protein grains.

Their women were working outside, weaving reed mats, weaving wool, washing clothes in the stream—unveiled and unconcerned in our presence.

When we entered the village the older men gathered around me to learn who we were and what we wanted. When they were satisfied with our explanations they offered shelter for the night. They remained with us until prayer time, and later some returned and asked for medicine.

From Farangi Pass we had been on Khash Rud drainage. The headwater tributaries of this river form a branching, dendritic system which converges on the main stream in a general southwestern direction. From Tajwin our trail ran mainly southeast across this drainage, through a no man's land of long, sharp, barren black slate ridges and deep valleys. We climbed two of these ridges, each over a thousand feet up steep grades, and down again into the intervening valleys, before we came to the main divide, known as Regrawan Pass.

It was killing work for the horses, still exhausted from the punishment of Farangi, and disheartening for the men, who expected that each difficult climb would be the last, and were dismayed on each hard-won summit to see a harder climb ahead. The last long climb up Regrawan ended in a talus slope standing at the angle of repose for loose, dry rock, as if devised by Nature to test the final mettle of men who pass this way.

A few yards up this final climb one of my Farrah horses collapsed under its load. We uncinched the saddle and packed its load up on our own backs, then led the other horses up, and returned and worked an hour with the exhausted animal. Finally we got it on its feet again and fixed a rope around it like a breeching strap and literally pulled it to the mountaintop. We led it down the south slope without load or saddle, but it dropped twice again on the trail down, and the second time it died while we worked to revive it.

We reached the river Khash by evening, and pitched our tent on a gravel bank, and made a great fire of driftwood logs. We were on a river crossing where my general map showed a village, and the river flowing west. There was no village, and the river

was flowing east. But that made little difference to the men. They sat by the fire late into the night singing in high treble voices, rejoicing in our achievement. For over the last divide we had entered Gulistan.

Only one minor barrier, the low Siahband Range, now stood between us and the flat desert country to the south. We crossed this last divide at noon next day, wading through wet snow on the last steep climb. From the top our reward was complete in the thrill of viewing the vast low country ahead of us. Below, on the south, spurs of the mountains we had been fighting sloped down and melted away into the desert flats that vanished in haze on the horizon over Baluchistan. Several of the large north tributaries of the Helmand lay there in view before us; and in their valleys, as black dots far below us, were the tent villages of their inhabitants, and the small green patches of their wheat fields. Behind us, those who cared to look back saw the black, uninhabited, desolate mountains that we had crossed, rising, range after range, till they met the wintry clouds.

By early afternoon we were among the upper villages on the river Farhad, a tributary of the Rud-i-Musa Kala which flows into the Helmand; and in the evening we camped near the village of Gurz.

From another village near our stopping place, we requested fresh animals to relieve our worn-out horses, and in the morning were furnished three asses—so small that the pack saddle of our dead horse nearly smothered one. An old man, whose matted black hair was longer than his uncut beard, came along with us to drive them.

We had not gone far, however, when we met the hakim of Gurz riding up the trail to meet us. Somehow he had been informed of our progress down the valley, and had come to ask us to stop for a while and rest with him. During our recent arduous days, the thought of rest was a luxury we had not permitted ourselves, but now, with no physical handicap ahead, we embraced it with a warm passion and accepted the invitation with such eagerness as to surprise our new friend. We went with him to his

ancient mud court and were given a dark hut like his own, entered by a hole in the wall from the courtyard.

The old man with the three asses was given his pittance and sent back, and the soldiers from Ghor were released with a letter to their commander exonerating them from all blame for not having taken me to Parjaman as ordered. Then we relaxed in talk around the teacups.

In the afternoon the hakim suggested that we go fishing in the Farhad, saying that there were good fish there which we could get by firing my heavy rifle into the water. It was not exactly my idea of sport, but under the circumstances I obliged with three cartridges that netted us a handful of minnows. Then, more in the line of sport, I placed a white stone on the hillside a hundred and fifty yards off and challenged him to a one-shot match with the rifle. Being unfamiliar with my arm his shot missed. By good fortune mine hit the stone, delighting Nadir, and gaining me some respect from the soldiers with us. All Afghan men are convinced of their inherent ability with the rifle. Many of them explained to me that their past victories over the British soldiers were due to their ability to shoot straighter than their enemy.

After the shooting, the hakim, Nadir, and I went swimming together in one of the deep pools among the rocks. I in the nude, the Afghans modestly in their thin cotton drawers. Then we retired to sup again and spend the evening in idle talk.

When we left Gurz next morning fresh horses were furnished to relieve ours of their loads. We also received another soldier escort—and a gift of Indian cigarettes.

Soon our valley pinched together, and we led our horses between the black hills of slate and schist. After a while I gained a lead on the packs, stopped by the way to read, and let them go ahead. An hour later a lone traveller, on a trotting camel decorated with bits of ribbon and small bells, came down the trail. Enjoying the jangling music of his silver camel bells, I joined him, startling him when I suddenly appeared from among the rocks, and we rode on together till we overtook my horses. Before noon the trail swung southwest, and we passed over the low ridges into rolling open country underlain by volcanics, where a green



THE GOVERNOR OF GHOR



THE COMMANDANT AT GHOR

COMMANDANT AT GHOR WITH GUARD



A TROOPER OF GHOR





MEN OF GHOR



MEN OF GHOR



MEN OF GHOR

carpet of fresh grass spread in the flat valleys, and herds of fat sheep were grazing.

In one of these fresh valleys we came to the walled villages above Naozad where open irrigated fields of lush wheat and barley attracted our horses irresistibly from the trail, and the fragrance of apricot blossoms from behind the walls teased us with the sudden overwhelming consciousness of early summer.

Extending down the valley between these villages is a line of deep wells spaced only a few yards apart and connected underground by a tunnel through which flows a strong volume of fresh water, supplementing the surface irrigation noted up the valley.

Also outside the village walls, above the wells and wheat fields, are the graveyards of these ancient settlements. In some places above the level of surface irrigation, acres of graves mark the rocky surface. Each grave is indicated by a long pile of stones with a large stone at the head and foot. Over many of the graves long poles have been planted with flags flying from the top. Graves of prominent men are indicated by larger piles of stones, higher poles, and bigger flags; graves of "holy" men are specially marked, often being surrounded by mud walls.

Throughout these districts, as in Badakhshan, such graves are a prominent feature of the countryside. They indicate the approach to villages and the sites of old villages; and in the desert lone graves commonly are found on all high points along the trails. Also as in Badakhshan and elsewhere, there is a noticeably greater number of small graves, indicating probably a high infant mortality rate.

Beyond the wheat fields and wells and graves of these walled villages we approached by evening Naozad, the headquarters of another district official. But the mild, thin desert night crept over us before we arrived, and when we came to the next running water in an irrigation ditch I halted and made a camp. The soldiers with me wanted to go on to the hakim, but every mile traversed in the night had to be retraced next morning to bring up the mapping; and besides I was in no mood yet for another official reception and the long hours of idle talk that it would entail. So I refused.

In Afghanistan, however, one is never his own master. The soldiers rode ahead and reported me to the Naozad official, and soon a delegation arrived entreating me to come with them for food and a safer sleeping place. Possibly discourteously, I refused, and they left in a huff. Later, however, they returned, asking whether I needed anything. I needed only a fresh horse, I said, to ride in the morning while mine was reshod. They promised that and departed a second time, and I turned in to sleep. Then a third time they came, bearing a gift of fresh eggs and bread, and with them came two young soldiers who stood guard before my tent all night.

In the morning no fresh horse was there. I reshod my own and then rode back to see the outcrops that I had missed the night before, leaving Nadir in camp with the packs. I also left my rifle, which I usually carried, and as I was leaving he came running to ask whether I carried my revolver, or was so foolish as to go unarmed.

The wisdom of carrying a rifle in Afghanistan is debatable. Brigandage is uncommon. If a lone traveller should be set upon, the mere fact that he carried a rifle would naturally make him the target for the first shot fired from ambush. On the other hand, most of the village headmen, and the khans in the central provinces, ride armed, and so a modern rifle gives a man much added prestige among the villagers and shepherds, just as a man who rides a good horse carries more authority in their eyes than one who rides an ass. Certainly the Afghans in my own party all preferred that I go armed.

My ride during the day was uneventful, except that I was in a mood to be alone and wherever I stopped to chip a rock some lone shepherd always appeared, seemingly from nowhere, to watch and question me. The desert, which at first looked so empty, was full of these lone men, each herding his flock where a little grass sprouted among the stones. It was lambing season, and with some of the flocks small donkeys grazed, carrying the newborn lambs in soft cloth saddlebags, protected against the fitful elements, for alternately the land was swept by hail squalls and cold blasts from

the mountains, and dust storms and twisting sand pipes driven in from the desert.

With our arrival in Naozad we were within an easy two-day march from Girishk, the end of our journey from Ghor. This put me some time ahead of our planned schedule, and I decided to turn west for a few days and carry my mapping nearer the Khash Rud so as to correlate better with the work that I expected Buie would do from the motor road when he came to Girishk to re-join me.

Accordingly, on March 5th we took the trail west to Faolad. But we had gone only a short distance when I became feverish in the saddle, and we camped. During the long days and nights of hard work and exposure in Ghor our strength had seemed never-ending, but after the holiday at Gurz a reaction had set in—noticeable in both the men and animals—and now we were forced to drive ourselves. Our main requirement was more rest and a good diet.

The following day we went on to Faolad, arriving there in the late evening. This march from Naozad was through uninhabited, hilly country, and when we came to Faolad we found ourselves again among people like those of the lower Farrah Rud and Shaoz sections, inhospitable and uncooperative. We came out of the hills into the inhabited valley of Faolad at dusk, expecting to camp by the nearest huts. But the villagers were not happy to have us and tried to move us on, saying that they had no feed for our horses, and that there was a large rich village just ahead where the people took great delight in supplying all the needs of strangers. We let them speak for a while and then, to expose their ruse, we took the man who had talked the loudest and forced him to go with us as guide to the place he had described. Of course there was no such place, and the bewildered fellow took us to the mosque some distance down the trail, where the mullah and his faithful were assembling for evening prayer.

Nadir, on such occasions, was sometimes high-handed in his dealings with contrary villagers, though he usually did it in such a manner that they respected his forcefulness and never tried re-

prisals. Here he simply ordered the mullah out and took possession of the place, and evening prayer was held in the fields outside while he fried eggs for us in the church.

On the 7th we marched twenty-five miles southeast toward Sodat Kala. Our horses were growing weaker, not having regained their strength as fast as we, and so we walked most of the distance through the barren desert hills, where delicate little red tulips grew wild among the rocks, giving the emptiness a touch of color. At dusk we reached again the southern limit of the hills, where the flat gravel desert stretched away before us, gray under a gray sky, like a calm sea on a cloudy day. The evening brought rain and wind, and when we saw three black tents in a gully ahead we went there too and camped beside them. Then we found that they were only a temporary camel camp, and that there was no water anywhere near.

In the early dawn we continued across the barrenness to Sodat Kala, where an old castle stands on the hot plain, surrounded by an adobe wall within which gardens and fruit trees were in full, sweet bloom, nurtured by a trickle of clear, fresh water brought there in a tiny open canal from the northern hills. Being unsure of the distance and trail ahead we stopped for water and forage, then marched on, making a dull trek over the dull plain that spreads southward to Girishk.

We reached Girishk late on the night of March 8th, thus ending our journey from Ghor. There followed then a lonely interlude of twenty days before we trekked again. Days of leisure at first welcome for the rest we gained, then days usefully employed in writing reports, and translating reported mineral locations; mending saddles, manufacturing new kit, as saddlebags and shelter cloths; then more demoralizing days of simply waiting, waiting for mail to reach us from Kabul before we again cut our communications behind us by riding back into the mountains.

Our plans called for the completion of three more projects before the summer. We meant to finish the mapping along the highway from Sabzawar to Girishk. We meant to explore Urazgan, a small district northwest of Kalat-i-Ghilzai accessible from

the Kandahar-Kabul road, from which had come many reports of mineral deposits. And we meant to explore the Hazarajat by running a traverse up the Helmand River from Girishk to Uni Pass, and thence to Kabul. Buie would undertake the first two projects mentioned, using the motorcar. I would attempt the Helmand River traverse on horseback.

On my arrival in Girishk I contacted Farrah by telephone and found that Buie had reached there two days before. But he was without transport. The new mud hut in which we had left our car had collapsed during the winter rains and the car was crushed. Word of this had reached me in Sabzawar five weeks before, when I rode there to buy horses, and I had arranged then for drivers to take it to Chaman (near Quetta) in India, for repair. But it had not returned.

Two days later, however, Buie came as a passenger on a Kandahar lorry, and we made a camp together beyond the west wall of the great Girishk fortress and set to work on our maps. After a week more, our own car arrived, and he went west again to continue field work.

While we were together another call came to us from Farrah. Two new interpreters, sent out by Kabul for Buie and me after Smala had left us, had arrived there penniless and wanted instructions. I had them come on by the next east-bound lorry, and met them two days later: Mohammed Simrah, a man of nomad stock, in his early thirties, Kabul-educated; and Gul Said, younger, formerly, for a short time, interpreter in a consular office in Bombay.

They had a long story to tell. When word had reached Kabul that Smala was no longer with us they were at once sent out to Farrah. There they learned the route that we had taken and set out on horseback to overtake us. But they travelled slower than we, had wandered a month in the mountains, and then returned to Farrah. Now at last they were reporting for duty. Gul Said went with Buie when he left; Simrah remained with me.

I wanted mail before starting up the Helmand River. Buie had found our December mail in Farrah, and Simrah had brought a bag that had been posted earlier. But our repeated calls to the Kabul office for news of recent mail were unanswered for twelve

days; then we were told a car was being dispatched that day. It did not come, and five days later, when we next had an answer to our calls, it had not yet been sent. I decided then to start without it.

In the meantime, spring had taken possession of the desert. Hens led their lively broods to scratch in the dust under the walls of the fort; sand storms rolled in like black walls from the southwest plain, borne by hot winds, ripping our tents apart and leaving drifts of silt inside. The irrigated mulberry grove before us was in full leaf, and the little watered plots of wheat were nearing head. I bought one of these little plots of wheat to give my horses grazing, but still fed grain to recondition them.

Few lively incidents broke the monotony of our wait for mail. A local official from up the river came and camped with his train of servants in the mulberry grove. Then of an evening there was the music of drum and flute, while his entourage danced with wild abandon as a group in a moving circle, each individually whirling and turning, with his long coat and broad pantaloons extended, to the rhythm of the drumbeat. On another evening there was a brigand raid on a passenger lorry along the desert road between Girishk and Dilaram. Stones were placed in the road and, when the driver stopped, the robbers fired into the crowd. Two men were wounded, and all were robbed. The wounded men were brought to Girishk, and the following morning the local hakim put out with three truckloads of soldiers in pursuit of the robber band.

On March 28th we broke camp and rode back to Sodat Kala, and the following morning we continued north to the village of Jamshed. We stopped there two days while I extended my mapping from Naozad, and Simrah located another suitable horse which I bought to replace the one lost on Regrawan Pass.

On April 1st we rode west to Musa Kala, a large village in the confluence area of the Rud-i-Musa Kala and another smaller intermittent stream flowing south from the mountain district of Baghni. We camped there on the north edge of the village near clover fields, where men were cutting hay with small hand sickles,

and women herded livestock on the stubble, while their children played near them till late in the long spring twilight.

There I spent another hot day mapping the desert fringe, and swimming in the rivers that I crossed, while Simrah and Nadir made final preparations for the Helmand River traverse.

When I returned to camp, Kirk and Buie were in my tent with the late mail, having driven there by car along the river trail from Girishk. This was the best of good fortune, the more welcome since it was unexpected, and we honored the occasion with a feast of all the best in our combined larders—a feast that ended in a sandstorm which threatened to take our tent, until Nadir made a timely rescue. Next morning Buie and I correlated our past work and future plans, while Kirk paced restlessly back and forth in the sand, impatient to be gone again. Then they left to resume their work in the south.

One task remained before I started north. In Badakhshan, as previously explained, I had mapped by compass traversing. In Ghor I had plotted our work directly on a tracing of the British-India maps (of 1916). But these maps did not include a survey of the Hazarajat, except that a few of the critical mountain peaks had been located by long-distance triangulation and their approximate elevations determined. Recent reconnaissance indicated that these peaks formed an excellent control net, with the necessary addition of only a few others as we went along from which to determine our position by plane-table resection. It was left only for me to determine the local magnetic declination and the position of our starting point at Musa Kala.

So, after Kirk and Buie left, I set up the table and oriented it to shoot Polaris when Delta climbed to culmination. I explained all this to Simrah, thinking to enlist his interest. This led him to look closely at the maps (which he had watched me working over for the past two weeks), and for the first time he realized what they were. His interest in my technique at once vanished, but his interest in the map and its significance was unlimited, and he demanded to know where they had come from and who had made them. Mischievously, I told him (truthfully) that the British had, suggesting that the Afghans were very fortunate in having such

obliging neighbors to map their entire kingdom so completely, and then to sell them prints for a few rupees. But Simrah was a supernationalist, a patriot of the European student type, and he saw no humor in my joke. Like all good Afghans he had an inherent distrust of all foreigners, and a special distrust of Englishmen and Russians and all their methods. He wanted to know who had been responsible for the work of mapping, and obligingly I gave him the name of the Surveyor General of India in 1916 (whose name is printed on the maps). Earnestly, Simrah copied the name in his voluminous notebook, threatening to see that appropriate action was taken by the Foreign Office immediately we again reached Kabul. He failed to take any note of the date on the map, or to recall the international agreement that permitted this work to be done.

My appointment with Polaris lasted far into the night, and in the early morning, before the desert haze was thick, I resected our position from Jam Kala—still visible at over sixty miles—and other peaks to the north and east.¹

When this was done I made final inspection of my baggage train—for this, our new expedition up the Helmand, was to be a well planned and efficiently organized affair.

¹ Magnetic declination at Musa Kala, April 3, 1938, approximately 2° 22' East.

CHAPTER X

ON NOMAD TRAILS IN THE KOH-I-VERNA

ON APRIL 5th all things were ready, and we left Musa Kala in the full glare of the morning sun, with the dogs barking after us as we marched away.

Four men, besides myself, now constituted our party: Nadir, the veteran of Badakhshan, Ghor, and Gulistan, officially our cook but accepted by all as first sergeant of our force; Simrah, our interpreter (still on probation before Nadir and me); Hossain, a willing lad who had joined us in Girishk as "stableboy," but whose duties were now extended to "plane-table man" since I had fitted his saddle to carry my instruments and taught him to set up the tripod; and our fourth member, Little Osis, a ragged lad of twelve hard years who had attached himself uninvited to our party. Osis had stowed away on the lorry when Simrah and Gul Said left Kabul, thinking to have a ride in a motorcar. But he had remained loyal to Simrah, following him faithfully over the mountains in search of me. Later in Girishk he had lived largely by his wits, sleeping sometimes in my camp and sometimes in the bazaar. Now he followed us on foot, cheerful and cheeky, making himself useful when he felt like it in return for the little food we gave him. "Little Osis," we called him then, though later we recognized in his tough little body the spirit of a man and simply called him "Osis."

We had six horses. I was mounted and led one spare mount. Hossain was mounted, and carried my instruments. Simrah and Nadir were mounted, and each carried his own bedding roll. The other horses carried my pack and a little food.

Also, as temporary followers, we had two extra pack horses and two men to lead them, and one mounted soldier assigned to us

from Musa Kala. The hired horses carried our heavier baggage to spare our own animals.

We took a small stock of food—dried fruit from Kandahar, rice, tea, sugar, a few fresh vegetables, and a few tins of American foods. Bread and meat and milk, we expected to buy in the villages.

Our destination was Kabul by way of the unexplored Helmand River, a distance of some three hundred miles by air line, but more than twice that by the devious trails.

As so often is the case, we digressed from the start. I wanted a geological section through the Koh-i-Verna, a limestone range trending northeast between the Rud-i-Musa Kala and the Helmand. These mountains rise precipitously from the gentle desert plain, and form a line of great west-facing cliffs along the Musa Kala. We took the desert trail north to Roshanabad, the nearest village at their base, marching easily together until the afternoon when, from a slight rise, we saw the huts in the far distance. Then I sent the baggage train ahead while Hossain and I turned east for a view of the Helmand.

The hot desert, after its brief spell of green a month before, was brown and parched again; the grass and tulips were gone, the plain barren of life now save for a few dwarfed red poppies that braved the sun among the rocks, and a herd of wild gazelle that grazed on a heat mirage in the distance. Sixteen miles east of Musa Kala, to get our bearings, we climbed a low kopje overlooking the green Helmand valley and its villages; and then in the evening we pushed on north toward the mountains, joining on the way a nomad camel caravan led by women and girls who, with their men away, hailed us unshyly.

We found Nadir making camp on the upstream side of the walled village by a little canal that fed the gardens behind the walls—gardens of wheat and barley among orchards of figs and apricots and mulberries from which drained a heavy scent of freshness on the dusty desert atmosphere. The old white-bearded headman came to my tent to make me welcome (and to sell us food—bread, ten cents, ghee, thirty-five cents, two chickens, twenty-

five cents), and to complain of the shortage of water that kept his village poor. A small dam upstream would have solved his problems.

When the long shafts of morning sun came through the crags above the village I called to conference Simrah and Nadir, directing that they lead the pack horses by an easy level trail west around the mountains to Shahidan, a village on the Musa Kala, while Hossain and I rode over the range and met them there at night. We discussed the simple route in elaborate detail, drawing sketches in the sand as if outlining a week's campaign. Then we parted, and Hossain and I spent the morning climbing to a view of my control peaks. In the afternoon we led our horses like goats down the west-sloping ledges to the desert trail, where we mounted and rode on with disgraceful ease. Not far ahead we overtook Simrah riding alone, having deserted his charge already by leaving the slower pack train somewhere on the trail behind. Seeing it unwise to have the party in three parts, I asked him now to follow us, and we rode on faster, bearing northwest to look for outcrops where the river cuts a trench three hundred feet deep in the surface gravel of the desert.

At evening we forded the Musa Kala and entered Shahidan. But Nadir and the horses were not there. Shepherd's returning with their flocks told us that they had seen our tents to the east, near the foot of the mountains, an unlikely story since the horses had been all day without water and there was none there. Nevertheless, we went in search, crossing the river again in darkness and riding east by the stars. An hour later, by the mountains, we found camel bivouacs but not our own. Then began the old game of chasing campfires in the night with the forlorn hope that each was ours. At the approach to each fire, long before the black tents were visible in the night, the noisy dogs made prey of us, holding us mounted until their masters came. At each camp we were told that our horses had passed following the main trail northward. It began to appear that Nadir had never bothered to leave the main trail for Shahidan at all, but had simply followed it to a river crossing and camped by water. Going on this supposition

we followed the trail northward, wrapped in our blankets against the night chill, unhappy in the realization of our indefinite destination.

Finally we admitted ourselves beaten, and when after some miles farther we sighted another light, we turned to it for shelter. More dogs barked their warning to another nomad camp, and two men came out when we neared the tents. We asked for shelter from the north wind, and, grudgingly, they admitted us. Inside the tent, where they had been sitting by their little fire of camel-brush, was all their baggage, an uncounted number of women and children, and seventy-five spring lambs. Other members of the band were on the desert with the flock, and obviously these two were unhappy at the prospect of being outnumbered by strange men in their own tent. With measured hospitality, they brought us sheep's milk and bread while deciding our request. The older of the two agreed that we could stay, but the younger insisted that we leave. Simrah, always ripe for an argument, threw his educated weight into the talk, while Hossain and I more sensibly went to sleep and relieved their doubts of our intentions.

The desert nomads strike camp about two in the morning and march only till the sun gets hot. So before I was fully relaxed on my uneven pallet I was disturbed again. The camp was moving. Men and women were working together, tying loads on their kneeling camels, and the children were imitating their parents by loading their own things on young camels. Two of their three tents were down, the third standing only because I was sleeping there, and no one wished to disturb me.

I threw off the rug that I had appropriated to sleep under and joined Hossain and Simrah, who were saddling their horses. Then, without ceremony, we rode away in further search of Nadir. When the first streaks of sunlight descended on the western hills we reached the river again, and there, some fifteen miles north of the village of Shahidan, we found our camp.

These nomads, with whom we were now coming in contact, were the migratory shepherds from the southeast. They are probably the freest people in the world. Except that they are taxed by

Kabul according to their number of sheep (if the tax collector can find the sheep), they are their own masters in every way. Their range is through comparatively peaceful provinces, so that they are seldom involved in the local wars that harass some other sections. There are no fences in Afghanistan, and they know no barriers. Grazing is free except that they respect the irrigated lands of the villagers. Their flocks are driven, and they move as they please carrying their goods on camels, following the seasons and the pastures—going with spring up into the mountains and retreating with autumn into the desert. They often camp miles from water, grazing their sheep to the nearest stream and carrying their own requirements in goatskins. They live in the black homespun tents that I have described, made from their own wool. They also make most of their other requirements which are few and simple. Their food, like most of their clothes and their tents, comes from their flock. They live on milk and mutton, and trade their surplus to the villagers for flour. Their life, while free, is hard. Some members of the party are on guard with the flock night and day. This duty usually falls to the men, though sometimes men and women stand the night watches together. Women do the milking, prepare the food, and do the weaving. Now, with spring lambs to care for, they were unusually busy, as the lambs are kept separate from the ewes during the day, often being cared for by the children. Lambs and ewes are brought together with great commotion after milking time each evening.

Most of these people travel far in their seasonal migrations. Many enter India and Baluchistan in winter. A few have become semistationary, for here again, as east of Sabzawar, we found some members of the tribe camped near water where they have small wheat fields under irrigation, and where adobe mosques and cemeteries mark semipermanent habitations.

They are referred to as tribes, but the family seems to be the strongest social unit. Their life is natural. When a boy wants his first wife his mother selects a girl for him, usually one from the same band. Each of the young pair has the right to approve or reject the other before marriage, following the prevailing custom of the country. A widow cannot remarry outside the family she

has married into. If a young husband dies his brother or other near relative takes the widow, although he may already have a wife of his own.

The women are not segregated as most of the village women are, and they are relatively free as compared with the village women. They do not wear the purdah (as the Kabul women do), though usually they make some slight pretense of covering their faces before strangers. They are more casual in manner, less cowed by their men, and seem to look the world in the eye more directly than their urban sisters.

The young women are distinctly pretty, judged by Western standards; but the hard life soon hardens them until they look prematurely old. All, old and young alike, are slender and graceful. Their common dress is a plain black shawl which they wear gathered at the head like a bridal veil, with flowing folds hanging over the back and shoulders to the ground. In the place of skirts they wear loose, baggy pantaloons gathered tight around the ankles. Many of them are heavily ornamented with bracelets, anklets, and head ornaments of silver.

For the most part, these people are peaceful, friendly, and tolerant; but, like all Afghans, they are suspicious of strangers. They settle their own disputes by judgment of the entire family assembled together. There appears to be little trouble among the tribes, and, rather remarkably, no disputes over grazing rights. They played no great part in the recent revolution, probably because they are much less under the influence of the mullahs than the villagers. Like most of the villagers and all other Afghan nomads, they are all illiterate.

I left Nadir camped where I found him and rode west to carry my mapping to the village of Sar-i-Teznai, where I joined the work done near Gurz on our journey south from Ghor. During the next two days we rode slowly north back into rough country where the hills squeeze the river into a narrow valley, and where a little snow still capped the mountains on either side.

April 10th saw us leaving a little group of huts called Shal-i-Gird. We were up early and away late as usual. The previous day

one of my horses had gone lame on the trail from the loss of a shoe, and I had left Simrah in camp for several hours with the outfit under orders to hire a villager to reshoe the horse. When I returned in the night from mapping, the foot had not been touched. The excuse was that we had no horseshoes. When I produced one that he himself had helped pack in the saddlebags, the answer was that no one there knew how to shoe a horse anyway. I suggested that probably I should cable America for a blacksmith to come and teach people who had been using horses since the birth of Asia how to nail their shoes on. But one becomes accustomed to such an attitude after a while in Afghanistan and learns that the proper answer is to do the job one's self. And this is what I did before we left Shal-i-Gird, while Simrah looked on with no concern.

When we reached Shal-i-Gird I had gone as far north along the Rud-i-Musa Kala as I cared to go, and for the past two days we had been searching for a water gap through the impassable barrier of limestone cliffs bounding us on the east. From my tent this morning there was visible a reentrant where it appeared there might be a pass. The villagers said there was a pass and a good trail over it, and so when my blacksmithing was done I sent Simrah ahead with the pack train to follow it, while Hossain and I climbed a near-by hill to set up the plane table. With our better view from the plane-table station, however, I could see the reentrant completely surrounded, like a box canyon, by vertical cliffs from a thousand to three thousand feet high, and through field glasses I saw my pack train heading into it on a trail that looped back to rejoin the one we had come over two days before. Through some misunderstanding the villagers had actually directed us by a roundabout way back to Musa Kala.

Further inspection of the country from our hilltop lookout revealed another break in the mountain front far to the northeast where it appeared a stream emerged to join the Musa Kala. I made this our rallying point and sent Hossain posthaste to overtake Simrah and direct the baggage animals back on the river trail.

In the evening we assembled at the appointed place, and I was

rewarded by finding a large stream that came through the mountains there, with a settlement of seminomadic shepherd-farmers on its restricted outwash plain. The people called the stream the Rud-i-Dera, and said that their own settlement was known by the same name.

These people were sociable and joined freely in conversation with us and willingly sold us what little food we asked of them. In the course of our talk I discovered a blacksmith who understood horseshoeing, and the next morning I engaged him to refit all my pack animals, while I crossed to the west side of the river to extend my mapping.

Recently I had overrun my control, the valley being so narrow and the bounding hills so high that the located stations were no longer visible from the river trail. This is one of the weaknesses of mapping in a country of high relief by resection from a few located peaks, particularly where the trails generally follow valleys: it necessitates much climbing with the instrument to high points along the trail. My solution was to "shoot in" secondary control in the valleys ahead by triangulation whenever three or more of my main control points came in view.

This was my principal task now from Dera, and the first station that I selected was a high pinnacle rock on the range several miles west of the Musa Kala. The weather was temperamental as intermittent thunderstorms bearing cold rain and hail alternated with spells of close sultry sunshine. I sketched the geology between storms on my way to the pinnacle, and sat huddled under a poncho to protect the map when rain was falling.

Finally I reached the top of my lookout as another cold rain squall came that way. As I sat there under the poncho, waiting for it to pass, there came a loud, hissing sound apparently from a crevasse under me. Only a few minutes before as I was climbing up, relaying the instrument precariously from ledge to ledge, a small snake had crawled away from me; and naturally now I thought, from the hissing, that another larger one was questioning my presence on the rock. The peak was only a few feet across on top, barely wide enough to take the tripod, with a sharp drop all around, so that an encounter there was a serious affair, and I

drew my gun to settle matters. But I could not find the snake, and finally put the gun away. A few minutes later the same hissing came again, and again I vainly made armed investigation. This was repeated several times until I finally gave up the search. After the storm passed I picked up my Brunton compass to take a bearing and the instrument hissed in my hand. Then, to my chagrin, I understood what was happening. From its construction the Brunton is meant to be air-tight. Apparently the atmospheric pressure was suddenly much decreased in the passing storm, and the Brunton, confining air under higher pressure, had sprung a leak and was hissing interruptedly like a punctured tire.

Actually I saw only two snakes in Afghanistan, and neither of them was venomous, though of course I was in the field mostly during winter. It is said that the Indian cobra ranges into the eastern and southern provinces.

At another plane-table station, which I had set up on a steep hillside near Dera to locate an outcrop, I was entertained by two dung beetles of a species very common in the district. These two were huge, black fellows with heavy armored wing plates and strong, flat mandibles like the scoop of a steam shovel. They attracted my attention when I saw a large dung ball come rolling uphill, and I stopped to watch. One was doing all the work, with his back to the ball, pushing vigorously with his hind legs and travelling backwards, rolling the ball rapidly up the slope except when gravity or an obstacle overcame it and twisted it back down to one side or the other. Then he would take a firmer grip and start up again. The other beetle, apparently his mate, was riding on the ball, doing no work at all. While I watched, the ball rolled into a hole several inches deep and the energetic one tried vainly to roll it out. But the steep sides of the little crater were over his reach and the ball always tumbled back on him. After several unsuccessful attempts he gave up this method and started using his scoop shovel to dig a way out. But he hadn't a chance; the task he had set himself was as impossible as mine in trying to explore all central Afghanistan alone in less than a year's time, for he was digging on the wrong side of the hole and had the whole mountain to tunnel through. After a while, when he was

too busy at work to notice, I removed the ball a few yards beyond the hole. He got very excited when he turned and found it and his mate gone, and in a panic started running aimlessly around the hole and then over the ground outside. But soon he gained control of himself, as if reason prevailed, and settled down to systematic search. He returned to the point where he had last seen the ball and started out from there again calmly, walking in ever widening circles around the hole. Then, before he had extended his search far enough, he stopped and very deliberately lifted his heavy wing armor and unfolded his delicate wings and took off with a roar like a miniature bomber. He flew systematically in circles near the ground, extending the search until he passed over the ball with his mate still clinging to it. Then he made a crash landing and ran for it. The last I saw of them they were rolling merrily along uphill again with one riding and the other pushing.

On the question of trails the Dera people told us that we now had a choice of two. The one we had come by, they said, continued north, following the river and the long line of limestone cliffs into the unexplored central section of Hazarajat. Another entered the water gap cut by the Rud-i-Dera and led to Urazgan. This was somewhat confusing, for Urazgan lies far to the east of the Helmand. Our next objective was to reach the Helmand, if possible in the district of Khuni, by any trail that would complete our section of the Koh-i-Verna. The Dera trail seemed most likely to accomplish this, for Khuni lies between Dera and Urazgan. So, on the 12th, we entered the water gap and rode up the Dera Rud.

This we followed for only a little distance, however, for shortly the trail turned on a south tributary and we were bound on a southern course all day, camping at night near a pass at the head of the tributary stream. The canyon through which we passed was uninhabited and, for a short distance, furnished one of the few small examples we had seen of unmolested native vegetation on good, rich land, where, to eyes so long accustomed to the sterile view of barren, sun-browned hills and desert, or the clothed view of husbanded gardens behind mud walls, there flourished an indecent exhibition of naked fertility. Large spreading trees were

fresh in budding leaf, and the grass by the clear, fresh stream was still young and succulent; large red tulips, magnificent by comparison with their diminutive relatives that had died on the Naozad desert two months before, gladdened the way, and wild rhubarb spread its elephantine leaves over the rocks on the higher slopes where there was not soil enough for the other plants to grow. We ate the rhubarb raw as we marched along, and cooked it with our mutton that night to freshen our diet.

The trail was delightful, the weather perfect. The men were rested from a day in Dera. But there was a note of discord in our Garden of Eden. In the first place, the hired men from Musa Kala were getting tired, and too far from their homes for their liking. Their horses were already weakened from the unaccustomed work, and from want of grain which their owners refused to buy for them. They had become slow and constantly delayed our march, so that we made two miles where we should have made three, and ten where we should have made twenty. The men wanted to go back by the easier trail that we had followed north, and protested our march into the mountains, and so were in no mood to drive their halting animals. This was entirely anticipated from past experience, and I had held my own better fed horses in reserve to carry us on if they deserted before I could enlist replacements. Now there were no replacements in sight nearer than Khuni. The men knew this, and they also knew that I intended taking them there before releasing them. They looked at the barren, rocky mountains and the steeper trail ahead and became more disheartened, and in the evening they came with solemn courtesy and asked if I would let them go.

This was not a serious matter since I felt self-sufficient without them. So I paid their wages, and in the morning the entire Musa Kala detachment, including the soldier, left us and turned back.

More disconcerting was the growing discord in my own ranks. There was bad blood between Nadir and Simrah. In our easy life at Musa Kala and on the desert trail their feud had smoldered with only minor rumblings, and I had chosen to disregard it; but now that the way was rough again and our labors more exhausting, it was erupting in harsh words and subtle subterfuge.

Nadir was the self-made man, the worker. He had served well and obediently under Smala. On the hard trail through Ghor and Gulistan, after Smala had left, he had been my strength, and had remained steadfastly loyal to me. I had rewarded this morally with my respect, and concretely with wages much above his signed position as our cook.

Simrah was the educated man, the dreamer. He took his position seriously but contributed little. He was (like most Kabul interpreters) above work, but not above making constant demands for favors in the form of special allowances and higher salary. Shamelessly he asked me frequently the amount of salary that I received, and whether he was being paid as much, stating, but never demonstrating, that his qualifications were of the highest order—and that he had seventeen dependents.¹ His loyalty to me and to our mutual mission was questionable, and was never proved.

My own position in the matter was delicately balanced between strict neutrality and prejudice. Being human, I naturally favored Nadir. But Nadir was a hired servant, and Simrah was my official interpreter, assigned by Kabul. I had either to respect him or to refuse his assignment, which it was now too late to do. So when I failed always to support Nadir in the petty differences that they brought to me for settlement, he resented it and, refusing to understand, withdrew his loyalty. Defensively then, Nadir "swore a brotherhood" with innocent Hossain; and Simrah, with no alternative, took little Osis for his ally.

So matters stood on the 13th, though this was not all so clear to me till later. With the Musa Kala men gone, I dismounted my entire party and distributed the loads evenly on all horses save the one which now I always kept fresh in reserve. We went forward on foot, leading over the watershed and down its southern slope into an interior valley that drains out to the southwest via Baghni and thence past Roshanabad, our starting point. Then, lest we travel too far southward and complete a circle, I turned up an east tributary on a poorer trail that led to high (8,000 feet)

¹ His own wife and child in Kabul; his mother and several sisters and younger brothers; and his dead father's two "extra" wives and their children.

mountain meadows. We watered at the last pool and slept beside the tent of shepherds higher up where the rocks were padded with a little moss.

The shepherds sold us a lamb and some grain, and shared their poor grazing for one night with our horses. They said that from this pass one trail led south to Uni, and that another led east into the mountains and went they knew not where. They had never heard of Khuni—and we had never heard of Uni, and knew not whether Khuni and Uni were the same. I only knew that already we had come much farther south than I intended, and so I determined to scout out the trails before proceeding farther.

We were up in the early dawn before the sun. I left Nadir and Simrah to prepare some food and make ready to march, while Hossain and I climbed a near peak to reconnoiter the trail and determine our position. After an hour of hard work, without accomplishing much since our control peaks were not visible, we climbed down again expecting to move on and try later from a higher point.

But there was open mutiny in camp when we returned. Our unrolled blankets were still spread on the moss; no fire was started; the horses had not been rounded up or watered. Simrah sat in the sun writing in his notes and did not look up when we approached. Nadir sat away from him and watched us come, looking like one who had just made some important resolution and was weighing the wisdom of it. Osis lay in the warm sun grinning in anticipation of the scene that he expected now to see.

I asked what the trouble was. Nadir refused to take further orders from Simrah. Simrah had not joined us to do manual labor. That was all.

I told them that if they liked our exposed camp so well we would remain there till they wished to move. Then Hossain and I climbed a higher peak north of the trail to complete our observations. When we returned in the early afternoon food was prepared, and the rebels were ready to move out.

From the vantage points above our camp there appeared to be little choice between the two trails, and I thought to try the east one since at least it went in the right direction.

But this was a false lead which took us down to pastures in a canyon and ended there. I climbed the far side to see across, and then turned back from the wilderness of broken crags and cliff-faced valleys there.

The men were still in an ugly mood. When I turned back from across the canyon I was an hour ahead of the other horses, although we were all on foot, and all of us were leading pack animals. They said that their loads had kept falling off on the steep trail. Perhaps they had.

On the way back an old woman appeared from the rocks beside the trail begging for help, saying that her son was lying over the mountain, ill for the past two months. She wept bitterly when we said that we could not help, and she followed me shrieking mixed prayers and abuse when I went on and left her.

By evening we had retracked to our camp site on the meadow, and in the dusk we started down the trail to Uni, marching warily in file over the sharp rocks that paved the defile. Darkness came, but I pressed on, hoping to gain water, and some of the time lost on the other trail. The men were still complaining; but their complaints were not those cured by idleness, and so I kept them moving. After a while the horses were halting too, fearful of such cruel footing; and when we heard water flowing we stopped and spread our beds under a thorn tree and slept a weary sleep till dawn.

In the morning we came to Uni ahead of a great van of nomads who were moving up into the mountains. Uni was not Khuni, but only a cluster of huts at the junction of another interior valley draining out southwest, where a small acreage of wheat and a few fruit trees supported the permanent dwellers. They were separated from Khuni, they said, by another high pass to the east of us, and they pointed out the trail—another cleft in the never-ending limestone mountains.

We faced it with sinking heart. An easy trail ahead might have smoothed the festering hurt that Nadir thought he suffered, but a hard one only served to aggravate it, and before we had gone far he began to lag again. When his horse fell behind the whole party stopped, for in such rough going it was essential that we

all stay close together and help each other; and after I had waited for him several times, reducing our rate of march to something less than one mile per hour, I began to watch him more closely.

There was considerable underbrush in the canyon, and when he failed to follow me around a bend I stopped and led off to one side unseen in the bushes, to determine his delay. There I found him simply sitting by the trail; and when Hossain came by, he called him aside and kept him there also. They waited for half an hour and then moved on slowly. They took another hour to cover the next half-mile where the trail passed over slippery slopes of smooth, wet rock. Nadir was intentionally delaying the march—as now I knew he had been doing for the two days past.

When I came up behind them by surprise they moved on at a normal pace, but two miles farther on the crooked defile separated us and when I next came in sight he was stopped again.

The trail there switchbacked from the canyon floor to the slopes above, following eroded ledges in the limestone, wide enough only for a single horse to pass. Halfway up the switchback I found Nadir on a turn with his load down and the panniers open. The trail was effectively blocked. Simrah and Osis were ahead, and now could not descend. Hossain and I were behind and now could not go up.

When I came up Nadir angrily demanded his money; believing himself indispensable, he now declared that he would no longer serve with me. Without comment I counted out his earnings, preferring to avoid the argument that he was coaxing, though my heart begged him to stay even as I handed him the silver and told him to take his bedding roll and go. This, from me, was unexpected and he hesitated, until I repeated the order.

I then cleared the trail and called Simrah to come down, and sent Hossain up to look after the horses above, lest he recall his ties with Nadir and follow him. With Nadir gone we assembled on the round-topped hill above, each man now with two horses, and Osis pressed into service to lend an extra hand. Perhaps we could manage, I thought, if each man did his part now that the feud was ended. But while I was sweating with the last pack, angry at their trivial quarrel that had led to such disorder, Hos-

sain came to me weeping and asked that I give him his money too.

I asked why he was crying.

"Because I want to go with you," he answered.

"Then why don't you come with me?"

He said that he had sworn a "brotherhood" with Nadir, that Nadir's trail should be his trail, and that his trail should be Nadir's trail, and that now Nadir was leaving and he must also go. I reminded him that he had also sworn a promise to go with me. He acknowledged that; but, said he, the wily Nadir was holding all his previous earnings to insure that the "brotherhood" was kept to his (Nadir's) advantage.

My patience nearly gone, I told Hossain that I had packed and unpacked the horses for the last time that day, and now would not unpack again to get the cash box, but that if he would come with me to our evening camp I would pay him full. But apparently Nadir would not permit that either, for Hossain left without his money, still crying like a young child as he went down the trail alone to follow his adopted brother.

I was now left with six horses, an interpreter who was too good a man to work, and little Osis—who had come out from Kabul to ride in motorcars. It was late afternoon and there was still the high divide between us and Khuni. We needed help.

Some distance down the canyon we had passed a nomads' camp, and I now sent Simrah there to seek assistance. After a while he returned with two shepherds who promised to go with us until we reached the next village. Of these, one stayed with us for only half an hour and then, when I was not in sight, ran off and left his horses on the trail.

While I was rounding up these animals again Nadir and Hossain returned. They had come back, Nadir said, to go on with me if I would double their salaries, and give him unsupervised charge of buying our supplies. The average wage of a cook in Afghanistan is from sixty to one hundred sixty afghanis (Afghan rupees, then worth about ten cents each in American money). I had been paying Nadir two hundred afghanis and his food. He now demanded four hundred plus his food and the right to petty graft. To agree to this meant, in effect, to surrender command of the

party to my cook, and I refused, although I offered to take them both back at the old terms. But Nadir was stubborn too, and, speaking for his "brotherhood," declined the offer; then they left, and I saw no more of them.

The remaining nomad came on with us, and in the last red rays of the setting sun we climbed the pass: The mountains in this district are formed of bedded limestone with gentle dip-slopes to the west, gentle slopes which are dissected by the deep, sharp, hot ravines that we had been passing through. The east face of the mountains beyond the crest drops in cliffs, where each bed in the formation forms a vertical ledge and narrow shelf. On top the divide is a narrow hogback ridge. From this knife-edge divide we could see down into the partly cultivated valley of Khuni, more than seventeen hundred feet almost directly below us; but the descent was too steep and too dangerous to attempt in darkness, and so we stopped under the rimrock on top to await the morning, spread our beds on the moss again under a sheltering ledge, picketed the horses lower down by a shallow water hole, and had bread and tea by a feeble fire of dried moss roots.

I was too tired for sleep, and long after the others lay wrapped in their blankets I sat alone on the highest rock with my feet dangling over the cliff edge, meditating the events of the past few days. I was lonely, and more discouraged. I had worked hard recently to accomplish little. Again I felt betrayed by men I had trusted, knowing all the while that I was not betrayed at all, but that I was still a world apart from the Afghan's Oriental mind. I felt no self-recrimination; I had treated the Afghans with me as equals, showing them the same consideration that any field leader might show the men of his command. I had only insisted that they work, but I had worked harder than any of them. Always, it appeared, they lost heart and failed in the face of hardship or threatened danger or bodily discomfort. The brilliant record of their endurance, tenacity, and sacrifice in their inspired wars is glorious; but my mission—chipping rocks and locating survey stations—offered little inspiration, and it was difficult to make it a crusade. So my leadership was failing. Some of the roughest country in Central Asia was still ahead of us, and it was beginning to

appear that I should find no one who would willingly go through it with me.

So my musing ran, while a full, white moon rose silently behind me, that made the broken ridge a ragged, silver-crested coast line bounding the black lake of viscous darkness which flooded the depths of the valley—a lonely moon that embraced my mood, like that which carries the Kaffir's throbbing tom-tom beat to restless white men camped alone, tortures one with empty beauty on the Arctic snows, and makes the sea seem small at night, and sifts unreal color on the southern Andean peaks while solemn Cholos revel in the still, dark valleys. And as it gradually rose the shredded shafts of light spilled over the cliff edge, dissolving the shadows in the valley until the deep, mud villages of Khuni again were brightly visible below me. And then the light spread, bringing into view a distant landscape that I had never seen before. Beyond the valley another broad mountain massif, sprawling between Khuni and the Helmand, took form as the near ridge tops became sharply outlined against the half-white sky; beyond the Helmand, range upon range rose up successively to the eastward, the ridges misty with night and distance, the intervening valleys hazy, as if filled with thick, blue wood smoke; but northward, in the direction we must go, darkness still masked our trail, concealing all that lay ahead of us.

In the somber morning, while the others were rolling their blankets, I overhauled my outfit, discarding many articles which now we seldom used, so as to lighten our loads and simplify our daily packing. Then we moved on toward Khuni.

The descent from the pass was more difficult than it had appeared from the top. Our trail followed the rimrock for several miles, and then dropped down the escarpment a tortuous way from ledge to ledge where, in the beginning, it appeared no horse could ever go.

We reached the first village of Khuni in the early afternoon—a place called Langar, a little group of huts beside a little patch of wheat by a spring that flowed from the base of the cliff. Here we made a camp to rest and to reorganize ourselves.

The second of the two nomads from over the mountain was

still with us, and while we rested there in the evening he came to me and asked for medicine. He said that ten years ago he had married a girl, and that he had slept with her nearly every night since, but that she had never had a child. Would I help him? He did not believe me when I said that I had no medicine for that. And he was annoyed when I suggested that he might submit himself and his wife for examination by the nearest Afghan doctor. Somewhat belligerently I was told, first, that a doctor is *never* permitted to examine an Afghan's wife, and second, that if he had known I would not help him he would have deserted when his partner ran away the day before. It would have been much better, I realized too late, had I given him a little aspirin, or some other harmless drug, and sent him contented on his way to try again. Of course he quit me then, and again my party was reduced to Simrah and little Osis.

On the morning of the 17th I left Simrah in Langar with instructions to recruit fresh help from among the several near villages in the valley, and to hire camels if possible to again relieve our bruised and barefoot horses, while I went off alone with the plane table to extend my mapping over Khuni.

When I returned at the end of day Simrah was in camp working on his sheaf of notes. No camels or men were there. They were coming, he said. From where? He didn't know. Had he seen them? No! *He had been busy all day on his own work!*

On what work?

Oh, didn't I know? Why, he had assigned himself the task of writing two books, one a collection of provincial folk songs, another on the agricultural resources of the provinces. He couldn't be bothered to leave that to run errands after camels! He had sent a man from the village.

I recalled his prolific note-taking and his thick notebook, the long delays when we waited while he stopped to talk in the villages we had passed, and his month away from Farrah supposedly in search of us. Some of my troubles were being explained.

I repeated that we wanted camels and men by evening. He sent another man! This fellow returned alone after dark. Completely exasperated then, I told Simrah that he could either do as he had

been told to do in the morning, or go with Nadir and Hossain and report back in Kabul that I had discharged him. He went then to the village, but returned alone at midnight without man or beast to help us.

I was up in the darkness that precedes dawn next morning to feed the horses, cook breakfast, and strike camp, planning to go on without assistance since the valley trail ahead was smooth. But by the time I had three of the horses packed for the trail, four men came voluntarily from Langar with three young bullocks to help us. While they were cinching up the last loads, Osis and I led out with the three horses, calling to Simrah and the bullock men to follow.

We walked slowly down the valley while I sketched the route along the trail. We stopped to water the horses, stopped to examine the rocks, stopped for tea, waiting at each place for Simrah and the bullock men, expecting them to overtake us at each halt. It was impossible that any one could move at all and go as slowly as they must be following.

But I saw no more of Simrah that day. By midafternoon I concluded that we should stop and wait, lest some accident had delayed him and we get too far ahead. So, in order not to waste the day again completely, I left Osis by the trail while I selected a near-by peak to fix a survey station on—a five-hour job at least. When Simrah came, I told Osis, they should go on together and make camp at the nearest water, where I would join them when my survey work was done.

I came down from the mountaintop in the night before moonrise. Osis was gone, and so I presumed that Simrah had passed and I led on down the valley in search of their camp. It was completely dark, a pure enough night, but the depth of the valley shielded the stars, leaving all in shadow. Some little distance forward I smelled moist ground and a village, both easily detected unseen in the arid valley. Then Osis hailed me from three feet by the roadside, and I heard other muffled voices, and I found myself at the village wall.

Simrah was not there, and our food and bedding were with him. But Osis saw in our predicament a boy's first golden oppor-

tunity to grasp responsibility, and with an air of authority he ordered grain and food from the villagers, doing his job well, much to the suppressed amusement of the men who obeyed his commands. For a little silver they brought me a wooden bowl of curd, bread, eggs, oil, and a cooking pot and some fuel, and after we had filled ourselves with this Osis and I went to sleep on our saddle blankets by the trail.

Two hours later I was awakened by the camel bells of a long caravan passing in brilliant moonlight only a few feet from where we lay. I remembered Simrah and arose to saddle a horse and go back for him. But in going to the horses I came upon him sleeping on the ground near by. He had arrived some time after midnight, had unloaded our own three horses, and two strange camels, and strewn the outfit all around me while I slept.

Simrah told his story over the teacups at dawn: He had left Langar with the three horses and three bullocks shortly behind Osis and me. The bullock men soon deserted him. He got other help. It deserted him. During the day he had hired ten men, eight of whom turned back shortly after starting. The remaining two, who were with him now with the camels, had only come the last mile, and they had come only because they wanted medicine from me.

The long camel caravans continued to pass until just after sunrise, each contingent being led by women and girls, while the men and boys followed on the near flank driving herds of sheep and goats. When they had passed us we fell in behind them, leading our horses and taking three fresh camels from the village where we had slept.

I resolved now to remain with my outfit and keep them moving together, sacrificing my rock mapping for field-glass geology along the way. We marched easily on the level valley trail until nearly noon, though at each village by the way, at each shade tree and each stream crossing every one automatically stopped and I had to prod the outfit on again. Just before noon we entered the thickly populated, irrigated valley of Kishy, where fields and mulberry groves spread their green, and our way followed walled lanes through the gardens.

Through these obstructions, in order to maintain some map control, I took a bearing on a knoll beyond the villages, some two miles ahead, and rode on at a steady walk to time my distance. The party followed, though we soon lost sight of stragglers in the narrow lanes among the walls and huts.

Twenty minutes later, at my turning point, I stopped and waited for them to come up. Osis, again, was the only one who had kept with me. Together we had tea from a bottle while I finished my notes. An hour later my camels passed, and after some further delay several strange villagers came leading my remaining horses. Simrah was not with them. I waited a while longer for him and then rode after my baggage.

Around the first bend in the trail I found my horses deserted. Osis and I tied them in a string and led them on. Around the next bend I found all my loads, which the camels had been carrying, strewn about on the ground and deserted. The camels and camel men were gone.

I rode back to look for Simrah but could not find him, and returned again, frustrated, to the deserted kit, and to the grinning, impudent, loyal little Osis. Obviously, something had to be done if I were to reach Kabul within a month of my schedule. It was also obvious that, in the rougher country ahead, I should probably have to do all my own camping and cooking and packing, in addition to the work of exploring and mapping geology. My horses were still carrying fairly heavy loads; for every item I had previously discarded, Simrah had acquired some new article of his own, till his kit made one full pack load.

Now I decided to leave everything behind that was not essential. In one pile I put the things that I could do without: the servants' tent, because I no longer had servants; my own tent, because when night came I was always too tired to pitch it; my felt horse blankets, because they were not then necessary, and perhaps when we came to snow again I might find others; most of my cook kit, because Afghan cooking requires only one or two pots; my hurricane lanterns, because we seldom used them. In another pile I put my blankets, my instruments and maps and guns, one change of clothes, what little food was left, and a cook-

ing pot. These I repacked and loaded on the horses. In a third pile I put all of Simrah's things. Then I returned to the first pile, poured the oil from the lanterns over it, and touched a match to it.

This was done deliberately and not in temper, because I could not handle a five-man outfit alone. Of course I could have given the stuff away. But I was still trying to unpuzzle the Afghan character; I had made the mistake of generosity before, and found it interpreted as weakness, making of me a goat which others tried to milk. Shortly after I had doubled Nadir's wage in recognition of good service, he demanded that I double it again. When I balanced the daily operating cost of my party against the excessive prices asked for horses in Sabzawar, and found it cheaper to pay the price rather than delay by higgling, the word soon spread, "He's rich and foolish," and soon I found everything I needed increased in price tenfold. Now I was set on another tack to see where it would lead.

Simrah came up while the baggage was burning, after having spent three hours in the village drinking tea with a local khan, and writing down folk songs, while Osis did the work that he was hired to do. The situation was plain to him; I showed him his pile of kit and told him to do as he pleased with it, and said no more.

The day was finished. Wearily, I moved on a short distance and bivouacked near the village of Yakdan, where the Kishy valley enters the river Khod (or Kaj, or Khurd).¹ Simrah followed us without a word, with his belongings piled on his saddle horse.

In Yakdan next morning we remained in idleness about our open fire until the sun grew hot and urged us to the feeble shade of some thin-topped thorn trees by the river. Men from the vil-

¹ The lower Kishy is a broad valley with a small stream. It is thickly populated, with the villages of Sia Sang, Sar-i-Aw, Peerjawat, Kishy, Shah Jouy, and Yakdan, all near together from south to north. It is a richer agricultural district than any we had yet come to north of Musa Kala, having a considerable acreage under irrigation in the valley.

The river Khod is a large stream, bringing down a flood of snow water from the south slopes of the Koh-i-Khurd, the 13,000-foot mountain pile in southern Hazarajat from whence it drains. It enters the Helmand a few miles below Yakdan, and is one of the main northern tributaries of the upper Helmand system.

lage, as if still rich with the luxury of winter leisure, came there too and crowded our shade—a little knot of men when the sun was high, a line of men when the shadows lengthened. A few inquisitive old crones, ostensibly in search of greens for their silkworms, lingered near to eye us. A few energetic ones brought us provisions which they tried to sell at double Kabul prices. One fellow, a good village blacksmith, engaged himself to us to make nails (by hand, with a forge and anvil and hammer), and to reshoe all our horses.

By late afternoon the increasing crowd grew pressing and I left them and wandered off alone to the fuller shade of some ancient mulberries farther from the village, seeking the mental relaxation which an Afghan crowd denies one, desiring to be alone for a while and free to think and plan.

There comes a time in the experience of most men who work alone in foreign lands when they realize the necessity of scraping most of their own habits and conforming more with their new environment and the ways of the people native there. After trying patiently for a while to maintain their own standards of what they consider efficient accomplishment, in such lands where time means nothing and work too often is degrading, they readjust themselves and realize that they can do most by employing local custom to the best advantage. Others, constituted differently, rebel, and become more insular, often developing a case of "nerves" and a strong antagonism towards the native people they employ. I had seen extreme cases of this in Central Africa, where some of the men I worked with there over a period of years simply "saw red" if a black boy crossed their path; and in the Peruvian Andes, another colleague in a similar frame of mind had nearly caused a revolt against the "gringos" in our isolated station. These men fail. By nature I had always been inclined rather to "go native"—at least to project myself sufficiently into local thought to gain cooperation. But the Afghans were proving impenetrable.

This baffled me, and I groped for the cause, reviewing again my experiences of the past fortnight. Were the Afghans really as impossible to deal with as I was judging them, or was I at

fault? I had been trying to impose a simple schedule of work. Each attempt had been frustrated. I had anticipated that our easy march down the Kishy would compensate our struggle over the Koh-i-Verna, and that we could recruit fresh men along the way. We ended more demoralized than ever. My sin, I thought, was not in lack of understanding, but possibly in overzeal for accomplishment not shared with them. After all, there was really no reason why these men should go with me, except of course that I paid them their own prevailing wage and in the beginning they always freely agreed to accept it. But Simrah was under a definite obligation to prosecute our mission, and he was worse to deal with than the average villager. Perhaps it was only the old conflict between the energy of the West and the lethargy of the East, in which the East is said to always win. Mine was ever the urge to go forward, theirs the constant desire to go slow, to digest their days without racing past them. One man alone cannot change the temper of Asia, I reminded myself.

In any case, I desired to be alone for a while before taking the party further. The Helmand River was in sight, and the great mountain land through which it flows was just ahead. We should be fresh before attacking that. Furthermore I had met temptation. The river Khod drained from an unknown land north of us. What explorer could willingly ride past without wishing to follow up the Khod? Yet it was unwise then to lead the party on a new venture that appeared so aimless.

Lying awake, on the night of the 20th, I made a plan. I would explore the Khod alone, taking only what provisions I could carry in a cantle roll. My pack horses could rest in Yakdan and regain some strength. Simrah could rest also, and drink tea with the local khans till he had his fill, and perhaps establish a sounder basis of cooperation with them. I would return in a few days in a healthier frame of mind. We should all be in better shape then to undertake the hard work ahead together. The plan seemed good. I slept on it.

On the morning of the 21st I approached three young men in the crowd which again had gathered by our fire, and asked if they would work for me while I was gone, remaining in their

own village to look after my horses till I returned. If they would, I thought, then perhaps they might later agree to go on with us as packers. Rather unexpectedly to me they readily accepted without the usual higgling; and what was more, although I had not yet asked it, they vowed by Allah (with much braggadocio in voices loud for all their brothers in the crowd to hear) that they would go to Kabul with me when I came back, if I really wanted three good men to help me. Their offer to serve did not ring true, but nevertheless, with tongue in cheek, I accepted all their vows, agreed to the salary that they asked, and took their names and their fathers' names and the name of their khan, as is customary. The bargain thus was sealed, and to satisfy their desire to make it seem important we put the terms in writing, both in English and in Persian.

After this was done I got my saddle and made ready to leave. But when Simrah learned of my intention to go off alone he wanted to go with me (just the thing that I was trying to get away from), and the plan began to miscarry. When I demurred, he insisted. Had he suddenly a feeling for my welfare, I wondered, or was he bound by Kabul not to let me operate alone? I suspect the latter reason was the true one; or possibly he really wanted to see this new country too and take notes on what was there. In any case, I was inclined to compromise rather than waste more words in petty argument. Of course I really needed Simrah (I rationalized); my command of the language was very limited, and the two of us together could always gather more information than either of us alone. I recognized too that his interest in the provincial peoples was commendable, so long as it did not interfere with his other duties. Actually it is a remarkable fact that practically nothing is known of many of the isolated valley communities in Afghanistan, even by the Kabul government. They are often spoken of as "separate nations." And so they are in many ways, with each settlement confined to its own narrow valley, a self-contained community cut off from others by natural barriers of mountains and desert, with little communication between valleys and no contact with neighbors except indirectly through the nomad shepherds or the occasional traders who bring

in goods from the bazaars at Kandahar or Kabul, or salt from the mines in Kataghan. They are only loosely tied to Kabul by the local governors, and Kabul has never attempted any systematic surveys. Perhaps some service could be rendered by a man like Simrah who took notes as he went along with me. So I justified my inconsistency and, with some misgivings, agreed that he might come.

We left about noon, each of us mounted, leading one pack horse between us. For a short distance we rode north close beside the river, where a narrow strip of green fields spreads between barren, low mountains and the water's edge. But a few miles upstream the hills close in, and the river undercuts them, so that we had to leave the stream and cross the hills by a low pass.

From this divide we looked down upon a broad desert valley ahead, bounded on the west by cliffs several thousand feet high rising up to the Koh-i-Verna, and on the east by the Khod flowing at the base of lower unnamed mountains. Far to the north, beyond other intervening ranges, was our first view of the mighty snowcapped peaks of the Koh-i-Khurd. Dotted over the broad brown floor of the basin were scattered nomad tents, dancing on heat haze that mocked the northern snowcapped highlands. There was no other sign of life or settlement.

For some time we continued north across the hot plain; then we changed our course to make a nomad camp—for talk, and a cool drink of curd. From this camp we learned where water could be found in the western foothills, and in the evening, in search of it, we rode up one of the many dry gulches that lead from canyons through the western cliffs.

We found the water and, as we should have known, a village too, nourished by it—a little village of low mud hovels in a swale, blending with the broad expanse of desert so that it was invisible even from a short distance. We passed by and rode till evening up the swale toward the mountains; then stopped and spread our blankets on the sand behind a shield of camel brush. Before our little fire was hot, however, two men approached to find out who we were and what our unusual business was. We told them the fantastic truth—that we were only looking at the rocks—and they

went away. But before our rice had boiled another came, a lean, dark-skinned fellow with a pointed beard, mounted on a desert pony, riding hard in the half-darkness with his gray robes flapping on his pony's shanks. In the circle of our firelight he skidded to a rakish halt amid a cloud of dust, mumbling, as he swung from the saddle, the salutatory greeting of the desert:

"Salaam aleikum. Peace be with you."

"Wa' aleikum. And with you." I fed more fuel to the fire.

He announced himself as khan of the village that we had passed, and said then that he had come to invite us to spend the night with him. I replied that we were better pleased to spend it on the desert since my work was there. But he argued; it was unsafe, said he, for us to sleep alone out there. There were other villages and other khans near by that we had not seen. They were his enemies. We were too close to his village to bivouac unguarded. The others would kill us while we slept; we should be found murdered beside his walls, and he would be held by the government for the crime.

While we talked other men came from his village and sat by the fire watching us, settling themselves comfortably in the sand as if expecting our talk to last forever. But I was still stubbornly set on my plan to be alone, and was unwilling to compromise it further the first night by retreating straightway to another village. So after a while I rolled in my blankets and ended the argument by silence. The old khan mounted then and departed, judging us either fools or imbeciles; but he left two of his men behind to guard us through the night. Both were sleeping soundly beside me on their heavy rifles when I awakened in the dawn.

On many other occasions guards were posted near me when I stopped for the night near a village without entering. The reason was this: When a crime is committed at any place, and the criminal is not known or cannot be found, the government often takes the khan or village chief nearest to where the deed was done and holds him responsible, on the ground that if he did not actually commit the crime himself he knows who did. So we find, in districts where blood feuds endure, each village chief guarding us against his neighbor. Abdula Khan may guard

us from Mohammed Khan one night, and Mohammed Khan may guard us from Abdula Khan the next night. Neither has any quarrel with us, but each is in feud with the other. Perhaps in years gone by Mohammed desired Abdula's daughter for his son (or for himself). The girl or her father objected. The girl was stolen. Abdula's men killed her lover and took her back. The villages thereby became involved in blood feud. How now could Mohammed better get revenge than to arrange for some important traveller to be found shot in his blankets near Abdula's village? Accordingly, Afghan hospitality is often strongly flavored by self-interest, and in many parts of Afghanistan good manners require that the traveller either spend his nights in villages, or else camp a long way from them.

Shortly after sunrise our guards returned to their village, and I left camp with one horse and the plane table, making for the nearest mountaintop to fix another survey station. Simrah remained behind. We agreed to meet again in the same camp at evening.

As so often happens in desert mountains, the climb, which in the beginning looked so easy, became more difficult as I advanced. There was no trail to follow, and the way I chose—the only way—was a wicked route beside a little stream which gashed the gently dipping limestone beds that formed the mountain. This narrowed headward to a dark ravine where slippery, slime-covered rock surfaces and steep ledges blocked our way, while higher up, above the head of the valley, crumbling rock surfaces delayed us, until it was late when I reached the top.

Usually after such a climb there is the fine reward of sitting on a peak, as on top of the world, and viewing all below and away a hundred miles or more. But recently the summer haze had increased so that many of my sights were limited to less than twenty miles. And from the haze this day came storms of wind and rain that lashed the mountaintop and held me crouching under a sheltering ledge till evening.

When the storms passed, I finished my observation and retreated, tired and wet, and hungry for the fire and food that I expected Simrah would have for me in camp when I returned.

But when, in the fresh darkness, I reached our rendezvous I found the campfire cold; Simrah and my bedding roll were gone.

I suspected, of course, that he had retracked to the village, reversing my decision of the night before; and, discarding my last hope for solitude, I went there too and found him, the proud center of a circle of gaping tribesmen. A fire burned brightly near by. Our blankets were strewn in the dust near the huts. Clearly, the stage was set for another long night of idle talk.

When I entered the firelight a hush fell, apparently in anticipation of my displeasure; but before I spoke the old khan, as if happy that I had finally gained my reason, came bearing a bowl of hot rice cooked in goat's milk and asked me to share it with him. Later, when the fire was low and no one cared to look for fuel to build it up again, we stretched in our blankets under the even dome of stars, and every able-bodied man in the village left his hut and women and slept there with us.

When the moon came up some time before morning I called Simrah, and we saddled our horses and moved on. This disturbed the villagers who had slept beside us, and they awakened too; and their mullah, like a rooster prematurely aroused to crow, stepped out and shook himself free of sand, and called his flock to morning prayer, and the last that we saw of our hosts was the long line of their posteriors as they knelt facing west in the moonlight with their bottoms in the air and their foreheads to the ground.

We rode west across the moonlit desert toward the cliffs of the Koh-i-Khurd. We stopped at dawn and made tea and then rode on again. We lunched on curd at a nomads' camp at noon, and reached the low hills on the north of the plain soon after.

I had intended spending the night in these hills and then returning to Yakdan next day, after I had found what they were made of. But "distant pastures are always green": Beyond this line of hills on which we stood there was another basin, remarkable in form, like a subcircular volcanic crater, or caldera, about five miles across, and surrounded by high limestone bluffs in which the strata dipped radially away in all directions from the basin. A large river—which the nomads termed the Kujran—came out of the mountains on the northwest, breached the rim of the bluffs at our feet,

and then drained out of the crater on the southeast to join the Khod, which was lost to view behind the eastern rim. Beyond the northeast rim the country rose abruptly to the lofty Koh-i-Khurd.

This variety of landscape was refreshing after the monotony of the limestone mountains and hot canyons behind us, and it was the more interesting since it offered a fresh problem. No evidences of volcanism were at hand, and no other explanation offered. So I elected to explore the basin.

There were villages along the Kujran below us, and in the evening (my plan for solitude now entirely discarded) we forded the stream and rode into a pleasant little place called Suf, where the people greeted us without suspicion, brought us food, and helped us cook our evening meal.

During the night in Suf I became ill, and the following day I was unable to ride and spent the time sleeping under the mulberry trees, while the villagers lolled about, occasionally bringing broth from the huts to tempt me. But the next day we were in the saddle again riding into the crater, and some of the Suf men were with us.

The riddle of the crater was easily solved. In the cliffs above Suf there was evidence of metamorphism in the limestone, and all about the village large, crumbling granite boulders shed clean coarse sand on the valley floor. A little searching in the river revealed the contact between these two formations, and this was easily followed around the base of the encircling cliffs. Clearly, the intrusive plug had punctured the overlying sediments, baked the limestone hard, and tilted back the beds, like a hot steel rivet driven through thin copper plates. The hard-backed limestone rim now stands more resistant to the arid climate than the more easily disintegrated granite plug, which has melted down easily under erosion to form the crater. The men of Suf told us of mineralization along the granite contact, and we spent the afternoon chipping rocks and taking samples. Then, in the night, Simrah and I rode back to our Yakdan base.

CHAPTER XI

UP THE HELMAND VALLEY THROUGH HAZARAJAT

FROM YAKDAN the treacherous Koh-i-Verna lay behind us and the broad Helmand valley stood full in view, alluring with deceitful promise of an easy way ahead. I responded easily to her beckoning. For hadn't I now a fresh following to go on with me?

Back in the village on April 25th, we found our pack horses in fine fettle after four days of rest in the khan's stable, where Osis, faithful to his past good record, had kept them all well fed and watered. Still strong in my faith in a favorable turn in our fortunes I straightway moved the outfit to a bivouac downstream in readiness for an early morning start to the Helmand next day. Osis and I did the packing and moving, our new men being nowhere near to lend a hand.

When the work was done, however, the new men came to our camp, but without other salutation they asked for money, an insolent breach of custom and good manners. Thinking they spoke of four days' wages for their work while I was gone I started to pay; but they demanded in advance a full month's wage, saying that they would not lift a hand to help us unless they got the silver first. This was mockery, and I refused. For this one of the men left us; the other two remained to argue, and finally, after long palaver, they agreed again to come with us if I would give them another signed letter of contract stating the terms that we had previously agreed upon, and adding that I would pay their wages daily. This I did to satisfy them.

Next morning I aroused the camp before dawn, fed the horses and made breakfast. There remained only the task of throwing on our light packs and moving out. But the red sun came up and

climbed till it was white and hot, and all that any Afghan present did was argue. First the two new servants (notwithstanding our previous agreements, the letters of contract, and the fact that they had not yet served) came with fresh demands for money. When I promptly refused, the second of the three left us. The other then changed his demands, saying that he would come only if I would also hire his horse and pay three times as much as we had agreed upon the night before. The horse had not before been mentioned, and as he stood thus stripped of all sincerity, I scorned his talk and turned away. But Simrah called him aside, and after long confidential whispering, the man again agreed to come and serve with us.

Then the son of the khan, acting for his father, stepped forth with haughty show before his men, and demanded to know why we had ever come into *his* valley, saying that he personally had been commissioned by the hakim across the Helmand to prevent such people as ourselves from passing by that way. I explained that we carried credentials from Kandahar stating why we were there, which he could see if he would take me to the hakim. But he was "far too busy" to go with me and, being illiterate, dismissed the letters. However, they quelled him for a moment, and, with an about-face, he even promised to help us across the river.

Everything seemed settled then, and I made another attempt to get the party started. But then they said that the Khod was far too cold to cross before the sun had climbed to noon. So we waited half a day.

At midday they moved; we made a mighty trek of at least two hundred yards to the river bank, then stopped again. The promised boats and men were not in sight, and the khan's son, smiling derisively, stood by with folded arms. It began to look as if he were executing perfectly his commission not to let us pass.

I asked after the promised boats.

He answered irrelevantly: "My father owns six horses, and all the village lands. A man in my position takes no orders from such as you." He had no intention of furnishing boats or men.

I swore at him then, and rode him into the flooded rice fields until his arrogance vanished and he was muddled to the belly; and to prevent his retreat behind the stout walls around his house, I

pressed after him on horseback, herding him deeper into the mire until he called for men to bring the boats.

They brought two rafts, each consisting of a pile of gourds about the size of pumpkins, tied together and covered by a wicker mat of willow branches. The two were lashed together, and our kit was piled on top. Two swimmers—the khan's men—then held onto the sides with their bodies in the water, and shoving off, propelled the raft away from shore by kicking. When the swift current caught them they were whirled away, the swimmers kicking vigorously until they had their bobbing raft out of the current again and onto the opposite shore a quarter of a mile downstream. It took several such trips to get our things across. Simrah and I crossed on the last load. The swimmers then forced our horses into the water and, clinging to their necks, swam them across. Then we reloaded and moved on toward the Helmand.

In the interconfluence area between the Khod and the Helmand I sent Simrah ahead with the baggage while I rode to a low hill on the south to locate another survey point. The new man from Yakdan came with me leading a pack horse with the instruments. Later we turned back to the trail and followed it up the west bank of the Helmand, through a district of many villages with cattle and cultivated lands, called Govergin—like Kishy, another rich oasis between the high barren hills that rise on either side.

In the late evening, before I had overtaken Simrah, our new man complained of being tired, and in the next village he stopped with a group of idlers to smoke their communal water pipe. The smoke made him sick. I waited awhile with him, then compassionately left him with his roadside pals, took the horse that he had led, and went on alone.

Simrah and Osis were camped on their blankets by the roadside some miles ahead, where I joined them in the darkness. I was tired and very weak; for since the first night in Suf I had been unable to take solid food. Osis, knowing my condition, brought me a pail of dirty milk from the nearest village, and together we made a fire and boiled it for my supper. When our chores were done the tobacco-sick servant rejoined us, seemingly in robust health.

Next morning while Osis and I packed the horses he stood idly by and watched us, remarking that he had quite forgotten how to pack. When we had finished, and offered him a horse to lead, he said that he wanted to return home now. When he was gone I was amused (and so were the men of Yakdan, and others of the middle Helmand country) to learn that during the confidential whispering in Yakdan, when he had finally agreed to join us, Simrah had met his demand for a month's salary in advance, and had given him the money, which he now absconded with.

We did not go far that day. All along we had been told that there was no crossing of the Helmand until we reached Ghizao, our next goal up the river. But before we had walked two hours we came to a crossing. The Helmand here has twice the volume and width of the Khod, and only one man and one raft were available for ferry service, so plainly the day was lost to more rafting.

The raft man, a willing enough fellow since that was his business, said that he could not manage the river alone, but must go downstream and fetch his partner. I sent Simrah with him to seek men among the khans of Govergin. Then I settled myself under a tree and worked on the map all day while Osis slept beside me.

In the evening two rafts appeared on the east bank. It was too late then to ferry the entire outfit over, but we crossed with the baggage, and left Osis alone on the west side with the horses.

Simrah was waiting on the east shore. A mullah and two khans with several of their men from Govergin were with him; but they were a sullen crew who disdainfully watched us carry our soaked bundles up the bank, without offering to help. They avoided conversation; the mullah led prayer; we slept in a row on the sand, with wet saddles and panniers strewn all about.

In the morning we swam the horses over and saddled up. I asked the khans then if they would hire us aid. One refused firmly; the other said that two of his men could come with us. "And will they run away around the first corner?" I asked. He said no, they would not; but I urged him to come too, to insure their labor, loading my argument with a promise of good reward, and the written request of the Governor of Kandahar which addressed all

people in the provinces to aid us as a government party. He said that he was sick. I laughed, and he yawned lazily. He was a hulking brute of a man who looked as if he had not been ill during all of his forty years. But the mullah, who was able to read our letters, advised him to come—and as the horses moved out in file he followed reluctantly, walking as slowly as possible and pouting like a small boy forced to do his chores.

Away from the river he directed his men to lead south, directly away from my line of march, by a trail that headed into the roughest mountain terrain between the Helmand and Urazgan. Some villagers by the way asked why we were going on that trail, which was so difficult, instead of the river trail—where I had planned to go. The khan replied that the river trail was closed by high water. Perhaps he was right, but I turned the column back along the river.

Simrah was in the lead; Osis walked with the pack train; the khan lagged behind, gradually drawing a greater distance between himself and the main body. I fell back too, partly to keep him in sight, partly to better see the rock (for during all this time I was still trying to plot the formations exposed along the way). Through the next village we lost sight of each other, and when I came out on the trail again no one was there. But some distance to one side a man was squatting among the rocks with his cloak pulled over him, after the modest habit of Afghan men when they urinate publicly. From his dress, I recognized the khan, using this ruse to let me pass ahead. I waited, giving him time to go before me. But he turned back, mumbling something in Pushtu, the language of the valley, which I could not understand. I rode up for the interpreter and when we returned he had retreated into the walled village, and all the village men had gone inside with him, leaving only women to keep watch from the walls. We left him and rode forward again. When we gained the horses the khan's men had deserted also.

With that I gave up trying to hire men to go with me as regular labor. Instead, from the next village we asked for men only to help us on to their nearest neighbor up the valley. We fixed a definite price and the men accepted. We relayed then from one

little group of huts to the next, taking two or three men from each place, paying and releasing them at the next nearest settlement, which was never far. Our costs ran up, and we were weary with bargaining, but we made better progress.

It no doubt seems strange to an American reader accustomed to pack outfits that it was necessary to have as many men as horses on the trail. This is local custom based on two reasons: First, the cumbersome native felt pack saddle, as usually used without breast strap and breeching by men so completely inapt as the average Afghan villager, requires continual adjustments on the march, so that it is usual for one man to manage only one horse and the load. Secondly, in many sections the trails that we followed were so extremely rough and precipitous that it took more than a few hands to manage. In many places, of course, two good packers using cross-tree saddles and proper harness could have handled the animals. But Osis was not a packer, and Simrah was an interpreter. The three of us together might have managed by relaying from one base camp to another and stopping while I rode back to map, but my hasty reconnaissance did not permit such luxury of time in passing over the same ground twice. Therefore, even though I had cut the outfit to bare necessities, we still relied on local help to move.

By late afternoon we reached the north end of the open Helmand valley, where the mountains close together and the river emerges from a mighty canyon between them with the cliffs rising vertically from the water's edge. From a village near the mouth of the gorge three young student mullahs agreed, at a price, to help us to the next village upstream which, they said, we could reach before nightfall by a trail over the mountains.

With a crimson sunset burning high on the stupendous cliffs and dropping hazy shafts of fire down the walled canyon from between the crags above, we started climbing the first narrow ridge toward the east. Our way was rough from the very start, the trail a goat's path on the crest. Not far along, the track swung north across the ridges, like the trail from Tajwin across the Khash Rud drainage. On the first steep slope the horses began to fall as the loose shingle gave way beneath them, and we reduced their loads

to half, carrying the more precious equipment on our backs. On the second climb the distressed mullahs also began to falter—from the unaccustomed strain of hard work, having spent most of their privileged lives at nothing more arduous than sitting under the mulberry trees in their quiet village and teaching each other Persian and religion from the Koran.

So we crossed two ridges. And then in the smooth twilight the unworldly mullahs rebelled, refusing to go on. No other help was near, and we could not afford to be deserted there, for it was as hard to go back as to go forward, so Simrah and I, in perfect accord for once, unsheathed our rifles and gently prodded them into action again with the butts of our guns.

We started up another ridge, worming from ledge to ledge. A horse slipped off and fell with its load to a shelf below. I climbed down to recover its gear, thinking the horse dead. But while I was packing up the saddle, the shaking animal got to its feet and followed me. When I gained the trail again all of the other horses were down, refusing further effort on such unfirm footing. In the gathering darkness we freed them of their loads and started back-packing everything to the top, and in total darkness we herded the animals to the third crest. There, exhausted and without water, we stretched like lizards on the still hot slabs of rock till dawn, while a thousand feet below us the Helmand flood roared through its polished gorge.

The sultry dawn coaxed us over a fourth ridge, and then we descended again to the Helmand where the mountains receded a little, leaving by the river a narrow lens of flood plain on which were gardens and three villages. This was the place that the mullahs had been leading us to. But the first group of huts was vacated, and so we went on to the next, a village called Arghor, where white mulberries were ripening and I ate a meal of them. Here we got fresh men, and the mullahs turned back, happy now in the thought that they had participated in a desperate adventure and now were desperate men.

North of Arghor the valley begins to pinch again, and in a short way we came to Khaiek, the largest of the three villages, situated at the north end of the twisting lens of river alluvium under tower-

ing bluffs. Beyond Khaiek these bluffs grow to cliffs of great height, some, in steps, reaching 5,000 feet above the river, and at their base standing near together, leaving only a bare slit through which the Helmand boils as from a nozzle.

These villages were protected by adobe blockhouses with slots for rifles. And they were sustained by little patches of grain and clover, and by mixed gardens of mulberries, apricots, figs, pomegranates, blackberries, and grapes. We found the people using clean white salt in place of the discolored, stratified salt that comes from the mines in Kataghan and is carried into so many districts in Afghanistan. They said they obtained it by digging up the earth around the older huts and leaching it with water—placing the earth on a sloping roof, pouring the water over it and catching it again in basins beneath after it seeped through, and then evaporating the water to recover the dissolved salt. I wondered, if this were true, how many times the same salt had been used over and over again by the many generations that have occupied the villages!

Unlike the men of Govergin, and strangely so in view of their isolated and nearly inaccessible position, these people received us well. We came into Khaiek in the early afternoon and explained our need for men to help us on toward Ghizao. They answered that the river trail was entirely impassable for horses, and that the only way was east over the mountains again, to the head of a tributary that was easier to follow—a journey much too difficult, they said, to begin so late in the day. If we would wait they would help us tomorrow. The cliffs bore mute evidence that they spoke the truth, and for once I accepted the testimony of villagers without question.

We were more than willing to stop and rest anyway. As for me, now recovered from my recent illness, I had developed a ravenous appetite, and none of us had had a bulk meal for many days. So we stopped and feasted in the shadow of the cliffs.

Next day, from the standpoint of purely physical ruggedness and sheer relief, we traversed between sunrise and night the most difficult trail of any encountered in Afghanistan. From Khaiek, at an elevation of 3,400 feet by the river, we climbed to over 7,000 feet, then down to about 5,000, then up to nearly 7,400, then

down again to around 5,000, then up over the final divide (Kotel-i-Durmay) at nearly 8,000 feet, and finally down to about 6,100 at the village of Kalieleigh where we stopped—in all by air line a distance of only ten miles, but almost all over rugged limestone ledges, sharp and hard and hot.

For me the day was uneventful except for plain hard work. We left Khaiek early under a warm sun, each man leading one horse, with swarms of flies following from the village. About 7,000 feet up, though the sun grew hot and there was no wind, the flies left us, apparently having reached their ceiling. There was no other life along the barren trail. We marched together until we crossed the first pass, the lowest but most difficult. Then I drew a lead, with one man and the instruments following, to gain time for a plane-table observation from Kotel-i-Durmay, where I climbed another 425 feet above the trail and found our position while the stragglers passed below. Beyond Kotel-i-Durmay our track entered shortly upon an open valley of easy grade, and we came by that to Kalieleigh, the first village. The horses were nearly done by nightfall. Two of those that had followed behind me had been brutally butchered by careless cinching, and the men reported that another had fallen from a ledge, its hurt not yet fully apparent.

The Khaiek men were marvelous. They promised to take us over the mountains in one day, and they did, without ever a pause for food or rest, without complaint, and without ever the mention of money—though in the end I voluntarily paid them double. They were of a different breed from the men of Govergin and Yakdan, and without them, or others like them, we could never have climbed out of the Helmand valley.

It was night when we entered Kalieleigh and a cold northeast wind drained down upon us from the snowcapped mountains farther north. The old headman came out and greeted us, and sold us corn and green alfalfa for the horses—which in the darkness Osis, with the best of intentions, fed too lavishly. But the village huts were too wretched and overpopulated to offer shelter, and we slept in our blankets in the sand.

Next day (May 1st) the Khaiek men turned back, and we took two fresh men from the village where we had slept. Our way passed

easily down to the junction of another, wider, open valley from the south, by which comes the main trail, and a single telephone wire from Urazgan to Ghizao. This open country is part of a valley system trending from northeast to southwest some 3,000 feet above the bottom of the Helmand gorge. It is bounded on the east by the unmapped, snowcapped range of the Koh-i-Kensan, and on the west by another unmapped, jumbled mass of complex mountains forming no distinct range, probably best termed the Helmand Mountains, since among them this upper drainage plunges down in falls and rapids through narrow, wild defiles to join the river.

The main valley, where we first entered it, was dry and only sparsely inhabited by nomads. Along this stretch, where the valley floor was covered with outwash from the sides, I rode off alone in search of outcrops, and when out of sight of my party met a government tax collector accompanied by two soldiers. The zealous official, apparently mistaking me for a wandering shepherd, asked to see my sheep in order to count them and levy duty. Not realizing who he was, nor quite what he wanted, my negative reply must have sounded much the same as he had heard from tax evaders, for he fixed himself and the guard doggedly on my trail until I finally led them to Simrah for fuller explanation.

Farther down the valley we came upon a small stream flowing across the structural valley, and the trail turned north on it and passed through a narrow cleft in a minor spur of the irregular Helmand Mountains and led us after a few miles to another smooth, open valley running parallel to the first. Unlike the former, this was watered by another good stream, and abruptly at the junction of the two we came upon the settlement of Kalach. Northward the combined streams charged blindly into the formidable maze of broken peaks and ragged, shaded canyons; but up the even valley of Kalach there were groves of fruit trees, and fields of growing wheat, and other level, flooded plots where men were preparing for a crop of rice. On the arid land beside the fields, groups of squalid adobe hovels stood clustered, built together with different roof levels, each room crowned by an oversized mud chimney convex upward like half an egg with a hole

punched in the end. Near the lower end of the valley, standing alone and dominating all else, was the house or "castle" of the khan who controlled the valley—a large, square fortress with a tower at each corner, and rifle slots, but no other opening in the thick adobe walls save a large iron-studded door.

The day was hot, and we stopped under the shade of some trees by the castle for tea, while the khan's men gathered around, and two unveiled women continued weaving under the trees beside us. After we had been sufficiently scrutinized from the fortress, and judged harmless, the khan's wife sent a servant to us with fresh bread, and an invitation to spend the night with them, saying that the old khan was away but would return in the evening. We accepted the bread, but not the invitation, and moved several miles up the valley to bivouac for the night. There by our open fire the khan, riding majestically with two attendants, passed us; but in puzzlement at the unusual sight of two armed men and a boy, with six horses and no tents, no servants, no merchandise, and no flocks, he turned back to question our identity.

These men, the khans, unlike the village chiefs in other mountain communities, are landlords, having about the same position in this part of Afghanistan now as had the old feudal landlords in medieval Europe. They own the land; others work it for a share. The share here was said to be four-fifths for the khan and one-fifth to the laborer. This reduces the laborer to serfdom. The khan lives in the castle, the serfs in the mud hovels. The khan rides a fine horse, with a saddle made in India, and has the few luxuries offered by the nearest bazaars. The serfs have nothing but a bare existence. The people are said to have been once virtually slaves, but since the revolution, in which the khans were divided, the people under them have gained slightly more independence; but economically they are still bound, for after their one-fifth of the crop is received they still must divide with the mullah.

The khan has economic control in the isolated sections where this system prevails; so the mullah, as in all sections, controls public opinion and inspires such a certainty in God as to forbid all hope. But there is no conflict between the khan and the mullah—rather there is the ancient partnership between landed gentry

and priesthood for mutual support and benefit at the expense of the common man.

Both the khan and the mullah may some day soon have to struggle to maintain their present advantageous position. The power of both seems to have weakened recently under the stronger central governments since the 1929 revolution. Of the two groups the mullahs probably have lost more prestige. They sponsored the revolution and led the fight against progressive reforms—the main issue over which the revolution was fought. Many of the people who fought under their direction have since come to realize that the mullahs' objection to reform was not entirely devoid of self-interest. And there has accordingly been some reaction against them. To make matters worse, the recent influx of foreigners, though few, has introduced motorcars, airplanes, and radios, and the people are beginning to ask questions that the teachings of the last thousand years have not answered. It is no longer sufficient to tell them that the foreigners enjoy all the good things of earth, but that they, as Mussulmans, will inherit the Kingdom of Heaven. They are beginning to ask for some of the good things now. At present, like other priests in the past under similar circumstances, the mullahs are hedging by refusing to discuss these things with their "laymen"; but they have their own heads together, and they probably will come out one of these days with some compromise platform as monstrous and suicidal as other priests have done when first they collided with science.

The khans, on the other hand, have a more concrete and less insidious adversary in the present Kabul government. For a stable central government in Afghanistan cannot risk too great concentration of power in any one man, or any one valley, or any one class, and the present Kabul government has kept a close watch on the khans.

No doubt we should have accepted the khan's hospitality in Kalach, and paid homage to his acknowledged position. One learns such things sometimes too late. But I was bound to Ghizao, and set on mapping the valley and avoiding all distractions and delays. We paid the price next day in fourteen hours of heartbreaking effort

to reach the head of the open valley. Normally we should have made this trip easily in half a day. But our horses were done; a reaction from the killing work over Durmay Pass had set in, and colic from the green alfalfa at Kalieleigh, added to their distress. Two were out of action entirely, barely able to follow; all the others were lame from bruises and sore feet, for they were all barefoot again, and our extra shoes were all used up. We whipped them to keep them on their feet and moving, and when we stopped, or turned away for just a moment, they lay down under their loads and it took more beating to get them on their feet again. The people in the valley, both the khan's villagers and the nomads along the way, all refused to hire to us for any price or wage. Simrah, rather undiplomatically in his complete distraction at our sorry plight, tried to rent a camel from a passing nomad and was set upon with a club until I broke up the fight. Villagers we tried to press into service ran off and hid among the rocks. We induced some small boys to come away and lead the horses, but their mothers followed us down the trail wailing for their release, and when I stepped aside a few yards to chip a rock I would turn again to find them all gone, completely out of sight, and the horses rolling in the dust. Little Osis, with his perpetual smile of amusement, did a full man's work. He was marvelous, but he alone was insufficient.

We came to the head of the valley at sunset, and passed over a low divide and down to another stream which cuts its way to the Helmand at Ghizao. There on a little mountain meadow, only a few hours' march from the village, we stopped for two days, while the horses recovered sufficiently to walk and I brought up my mapping-work that I had tried to do along the way.

This stream, by which we rested, flows down a rocky channel from the northeast, hesitates a bit and loiters through the meadow, and then with firm decision turns sharply to the northwest and races, like all the others, through a lofty canyon to the river. But it has smoothed its way better than the others, and so bears the main trail from Ghizao out across the mountains to Ghazni, and to other points in the more accessible highlands. This is said to be a better way to Kabul than the trail along the Helmand, and more

direct; but our objective was to explore the Helmand, and so we refused to look upon it.

Many travellers passed our open camp, or stopped in idle talk, for the meadow was a natural resting place along the arduous trail. Poor mountain men passed by on foot, and others not so poor on donkeys, all bound for Kabul. Four men came carrying a crude wooden stretcher with a covered body on some straw upon it. A nomad shepherd pitched his black tent beside us and remained a day, unpressed for time and attracted by the little patch of green. On the second day a young khan, with silky, boyish beard and soft white hands, came up from Ghizao with his flocks of sheep and goats, his servants, and his three veiled women riding on a decorated camel. He also camped beside us, and in the evening came to query who we were.

Many men of his class are haughty fellows who assume authority over all in their domain, whether actual ownership rests with them or not, for seldom is there any one to challenge their assumption. Such was he. All through the early evening we submitted to his inquisition. Then, in departing, he lamely asserted that the hakim at Ghizao had heard that strangers were on the trail, and had sent him to find out who they were and, if necessary, to offer them assistance; but his words did not ring true, for we had sent a message the day before by a traveller asking the hakim for help, and if any came we knew it would be soldiers. Also, the khan was on his way to summer pastures, and would not return to Ghizao. I replied by asking that he rent us two of his spare camels on the morrow to save our horses on the canyon trail. He said that we should have them, and then left us for the warmer comforts of his women's tent.

Shortly after this two soldiers came on foot and reported that they had been detailed to us by the hakim in response to our request. They ate with us; but later, when the young khan had word that they were there, he invited them to share his camp, and they spent the night with him.

In the morning the soldiers were reluctant to associate with us. When I asked one of them to bring the camels the khan had promised, he consulted with the khan and said on coming back that no

camels were available, and, further, that we must discontinue our survey of the valley and go with him in custody to the governor. So another khan had disapproved of us, and in disapproving had assumed authority to give the soldiers orders! I laughed at the soldier lad, and told him to hold his tongue and lend a hand as he had previously been ordered to do, or else leave camp and be reported for deserting. Perplexed at finding a third source of authority, and recalling his original assignment, he remained with us, and without the aid of borrowed camels we loaded the four horses still able to carry loads and started down the canyon.

All day we walked through a natural corridor between the magnificent limestone cliffs green with the tenderness of spring. Where the walls were close together the little stream lapped both sides, and we waded in the icy water; where they were wider apart we passed through pleasant glens shaded by large, bushy sycamores, and sparser trees of wild almond, and thickets of wild blackberry. By late afternoon, some twenty-five hundred feet lower, we emerged from the mouth of the canyon onto a hot outwash plain and marched across the burning gravel to Ghizao.

The district of Ghizao is best described as a great hole in the mountains. Strictly, it is not a valley, nor quite a basin, nor yet a crater, but a great irregular depression where an infold of soft rocks has been eroded and carried down the Helmand. From the north the Helmand pours through a dark straight-walled canyon onto the open floor of the depression, where it slackens and spreads out westward and meanders leisurely through a network of shallow braided channels, strangled by debris from two side streams. Across the depression, which is several miles wide, it gathers itself again and enters another dark canyon and rushes off to lose itself in the uncharted Helmand Mountains. From the southeast the canyon by which we entered emits its little stream through a wide terraced outwash fan that coalesces with other lesser fans from the south and spreads sterile gravel evenly over the whole southern part of the depression. From the north another stream, the Kokhar River, comes down a narrow valley from the Koh-i-Khurd and discharges a load of fertile soil in a wedge shaped fan north of the river. Except for these four breaks, the great bowl-shaped depression is

surrounded by high mountains, and of the four only two are open; for both the entering and departing canyon of the Helmand are closed at any other time than very low water.

Official Ghizao, the hakim's post at the end of the telephone wire and the little bazaar, is on the south side of the river at the edge of the gravel plain; but most of the settlement and most of the gardens are on the richer fan north of the river.

All this is not visible as one enters from the south. Our first view encompassed only the barren, torrid gravel plain, where heat mirage rolled over the surface like shallow, nervous waves, and the glare of intense sunlight, reflecting from the clean-washed pebbles, blinded us after the subdued shadows of the canyon trail. But half an hour's march across the gravel brought us to the edge of the terrace, where the full richness of the place came in view all at once, with a sudden impact on our senses. On a second terrace below us, and on another similar terrace across the river, fields of wheat under full head billowed in a gentle breeze that caressed the inner valley; and, below these, rich rice fields spread their watered green on the river flood plain. Beyond the far wheat fields cloistered gardens and huts ranged up the narrowing fan to the northern mountain wall. Collectively, this was Ghizao—a rich, isolated, secluded oasis so inaccessible that four machine guns could block all entrance to it except from the air.

We reached the hakim's house at noon, unsaddled in the shade of some trees by his wall, announced ourselves, and waited. The usual crowd of villagers gathered round to stand and gape; some soldiers came and helped us lift down the saddles; two very small boys shyly brought me a bouquet of roses (which were blooming profusely by the huts); but the hakim did not receive us. As the afternoon wore on, the prospect of an official reception further faded, and with it the anticipated feast of pilau which each of us had secretly permitted himself to hope for since I had taken over the cooking. We felt hurt, like small children who feel themselves not wanted—and we turned again to shift for ourselves.

In the row of tumble-down huts which was the bazaar we found Japanese tea and cotton prints, Russian sugar, Afghan raisins, and a few pieces of tinware brought in from Kandahar. Tea, sugar,

and raisins we took. We found men there, too, who could mend our boots and saddles and make new saddlebags; and we located a blacksmith and set him to work making iron shoes for the horses. I spread the word that we wanted men to join us, to go into the Hazarajat, and three local men made immediate application. We also received word there that the "big governor" of Urazgan was camped across the river, and I sent a messenger to him with my card.

In the evening, still social outcasts, we spread our beds beneath the trees and made our evening fire. There, while I was again engaged in cooking our own meal, two strange soldiers came to me with a month-old letter from the hakim at Dera Hoot, a station down the Helmand below the mouth of the river Khod. This official was the one referred to by the khan at Yakdan. His letter said that he had reports that we had passed his way without an escort and were "having much trouble," and that accordingly he was dispatching these two soldiers to overtake us and remain with us until relieved by another escort at some other post. We were greatly pleased; my ego was appeased; and the world looked brighter. I invited the soldiers to join our meal, whereupon our three prospective servants saw me in a new light and joined us also, and I added another pot of rice and we had our feast after all.

After the supper we relaxed in friendly conclave by the fire, or joined in easy banter, or smoked and mused. Then one of the Dera Hoot soldiers put down his long, old rifle for a guitar—an instrument hand-hewn from mulberry wood and strung with shredded sheep's entrails—and sang softly to his own soft accompaniment, and to our general entertainment. The moon again was full and came brightly into the soft warm night. Other lazy music drifted to us from the bazaar, and the balmy breeze carried the smell of dry adobe, and desert, and horses, or came spiced with the dank breath of wet earth and the voices of a thousand singing frogs, as it shifted from the irrigation ditches. This was neither an Afghan night nor Afghan music, and as the fire burned low the thin curling wreath of blue wood smoke that it still discharged carried away the Asiatic stage scenery and planted me in old Tucson

where, in my fancy, as I began to doze in my blankets, wine and ladies came upon the stage in Spanish costumes.

Next morning I sent Simrah across the river to interview the "big governor," while I remained behind to pass the day peacefully in unaccustomed rest. I tried to sleep, but the sparse foliage above was restless and leaked shifting patches of white sun that encouraged all the village flies to gather on me; I shifted and tried again, still fitfully. Then one of the soldiers spread his extra turban over me and it was evening when I awoke.

Simrah was gone all day, and in the twilight I had this note from him:

Sir—

I beg to tell you that on this side of the river is much available of great use to us if you can come across now. And everything is managed very well. If not reply me to start back. The Big Governor will manage himself everything we need. He is a good man.

SIMRAH

Of course I could not cross the Helmand with my outfit in the night, so I "replied him to start back."

On May 7th I came to a definite agreement with the three new men who had agreed to join us. They were well known local characters. Simrah had discussed them with the big governor, and he had approved of them, and of my plan to enlist them; and he had even sent a letter "ordering" them to go with me. To avoid misunderstanding, I had the commandant of the local garrison fix the terms of service, and we were all satisfied with those agreed upon. When this was done I felt my labor troubles ended for a while, and set aside the remainder of the day to lay in fresh supplies and finish mending gear.

So far, in leisure, we had gotten on famously with the new men. Now I thought to start them on their duties gradually, lest the sudden introduction to hard work on the trail discourage them. Accordingly, I brought out our worn bridles and torn saddles and bags that needed mending, and assigned each man a task, demonstrating precisely to each what should be done. An hour later, when I returned from my own work on instruments and maps to

see how they were getting on, two were sleeping soundly in the shade, and one was gone. In the evening, when they came for food, I set them to work again, and by night they finished what might have been done at noon.

Next morning I sent Simrah and Osis, the three recruits, and one soldier ahead with the pack train under orders to cross the river and make a camp. With the other soldier and the plane table I rode off to finish mapping on the south. At noon we turned back to the river, and crossed as before, by swimming the horses through the main channel, and rafting ourselves and saddles over on a pile of gourds.

Mounted again on the north bank I located my horses ahead through field glasses, and rode to them. But as I approached closer I bowed again to the inevitable, for I could see even from a distance that something had gone wrong. Simrah was alone with kit strewn all about; the horses were standing unpicketed with their saddles on, no camp was made, no fire started. I rode up in silence and dismounted to hear his story.

All the new recruits had deserted. When they had reached the river they demanded money in advance. This demand is always the prelude to greater demands and later desertion, and since I had told Simrah to grant no more advance payments, the new men refused to follow. The soldier had gone off to visit friends in the village. Osis was playing in the river.

This state of affairs, of course, was nothing new. But it had a new angle. The "big governor" had ordered these men to go with us, and I now appealed to him to enforce his order. He sent soldiers across the river to search the bazaar for them and bring them back. The soldiers did bring them, and by evening they were busy setting up our camp under a lone tree on the north bank of the Helmand, as lighthearted as if nothing had happened.

Later in the evening a delegation of four came to me from the governor with an invitation to join his evening meal, and, as was expected of me, I accepted with a pretty speech and followed them with due solemnity to their elaborate camp. Obviously their headquarters were arranged for the double purpose of maximum comfort and greatest show, meant to impress the humble people

of the district with the full importance of the Governor of Urazgan. I also saw a few added touches for our own notice. The effect was perfect and, by comparison with our own bare bivouac, very effectual, as I soon noticed by Simrah's self-imposed manner of inferiority in the presence of the governor. Where we had dusty pallets spread under a lone tree on the river bank, and only Osis and three doubtful servants for retainers to look after six sick horses, here we entered a camp of six heavy, colored Indian tents, each neatly carpeted, with another large rug (a full camel load) spread beneath the trees before the richest tent; and in addition to a staff of five secretaries and subofficials, there were twice that many personal servants, a squad of soldiers, and more than a score of other men to manage the transport camels and saddle horses.

The Company had arranged a formal reception. At one end of the large rug the governor—a pleasant little old Humpty Dumpty type of man with a Vandyke beard—reclined on a cushioned couch, as befitted his age and high position. His staff were motioned to positions on one side of the rug, Simrah and I to positions on the other. A soldier came to attention behind the governor, and another behind me. Some nice little nothings that neither of us listened to were voiced by each of us, and then I was presented to the five men opposite, four of whom I had accompanied to the camp. They in turn then, by rank, each muttered something nice, and then we seated ourselves on cushions while servants came with sugared tea and fine mulberries (these latter especially for me, since I had voiced a liking for them, while the others pretended that it was a great joke and insisted that I eat them all). With the tense formality broken by the mulberries, and mellowed by the hot tea, the governor bubbled immediately into a protracted speech which, I am sure, must have been rehearsed before I came. He spoke with unusual directness, and recounted so many good things about Americans that I began to see my own nation in a new and favorable light, though he soon added that I was the first American he had ever met, and so I accepted all the compliments for myself. He explained to me at length (like most of the Afghan officials that I

ever talked with), all the ambitious progressive schemes of the central government for the advancement of the Kingdom, and his own interest, as one of the provincial officers, in their attainment. Then he reiterated the high esteem held for all Americans by all Afghans, pointing out that it was easy to feel friendly toward us because every one knew that America had no territorial ambitions in Central Asia, and that they felt particularly friendly toward me because they knew that I was in Afghanistan only for the good of Afghanistan and they hoped I should soon be able to help them gain self-sufficiency in mineral wealth. Thinly veiled was the implication that they might feel differently toward me, as they then did toward some other foreigners in the country, if they ever had reason to doubt all these things were true. Then, subsiding somewhat from the heights of oratory, he noted that no other foreigner had ever ventured through these remote districts, and that I must find it very hard travelling here alone. Finally, with the end of his talk clearly approaching, he offered to grant any request that I might make for assistance. He started to add something else, whereupon his five staff officers unanimously rescued him from a more redundant conclusion by remarking that I would need all possible assistance, because, they said, my way ahead was "barred by five hundred passes, and many leagues of awful trail."

Pretending to be completely overwhelmed, I thanked the governor humbly (and genuinely) for his offer and for the previous assistance that I had had from the government, and also (somewhat hypocritically) for the close cooperation and assistance I had already enjoyed from his countrymen in the south.

Then the servants, who seemed to know just when the speech would end, came marching up in file with their loads of steaming rice and fowl, and other meats and fruits, and placed the food on an embroidered leather-backed runner which they unrolled on the rug. At a signal from the governor, the party began to eat, each man kneading a little rice between the fingers of his right hand without soiling the palm, and cautiously exploring deeper into the hot pile for tidbits of meat, while all talk ceased lest it insult the quality of the food.

After the feast was ended the governor and I, in more natural conversation, discussed the prosaic question of servants. He suggested that probably we should send two of the Ghizao lads back, since they were no good anyway, but that the other, who was less inclined to tricks and who knew how to cook, might go along. And he offered me two of his own men with their horses to make me mobile again. It was also decided that the two Dera Hoot soldiers should remain with me until relieved in Hazarajat. So, through the magic of his authority, I came again into command of an effective force, and, by a practical touch for which I was extremely grateful, he assembled all these men and the fresh horses in my camp that night.

Next morning (May 9th), we broke camp at dawn, eight men and eight horses strong. Our trail was north, up the Kokhar River, and in the beginning passed near the governor's camp, which I meant to avoid because of the early hour since they were still sleeping. But Simrah thoughtlessly rode in to say goodbye, and the leading pack horses followed him unescorted, while I was still behind helping the laggards to start, and herding the lame animals on the trail. There from the rear of the column I heard my lead horses scream. Strange stallions often fight on sight, and several from the governor's idle troop had broken their pickets and were attacking mine. It is an exciting sight to see unhampered stallions rear and box and bite and whirl and stretch with vicious kicks in duel. But mine were loaded, and were being mutilated, while their packs were being kicked to pieces. The camp was aroused, and half-clad men came running and shouting—and then ran back again from the vicious melee of tangled horses. Simrah and I alone were mounted, but Simrah was too near to be effective and was fully engaged in withdrawing his own horse from the fight. With the advantage of a running start I spurred my own mount forward and galloped in to whip the beasts apart. Other men then came with whips to help me, and finally, with the full use of black-snakes, we drove the opposing animals apart. But the sun was high and hot before we collected all the outfit and had the pack train moving on the trail again.

With little effort we reached the head of the Kokhar cone,

where the Ghizao gardens end, and entered the gorge through which the stream emerges from the mountains. The river was in flood with cold snow water from ranges north of the Koh-i-Khurd, and it was swift and all but deep enough to float a horse at the places where we were forced by protruding cliffs to cross first to one side and then the other. But by early afternoon our track left the stream and turned back east behind the mountains that wall in Ghizao on the north, and climbed through a wooded defile to the first of the "five hundred passes" that were said to lie ahead.

The new men already were beginning to lag, and I went ahead with two horses to fix a survey station above the pass (Kotel-i-Regan) while they led over. From the lookout where I was finally able to set up the plane table (at an elevation of 7,750 feet), the broad general features of the country that lay ahead came partially in view. Behind us now, to the west, stood the snow peaks of the Koh-i-Khurd, the highest of them reaching over 13,000 feet. Far to the east another range had become visible, and I sighted its critical peaks for future map reference. In the foreground was only a broken region of dark, sharp ridges and deep, steep valleys that hid all detail beyond a few miles from me. The whole scene was one of a barren, unlivid-in wilderness of mountains.

The pack train reached the divide and, before I finished, passed on and out of sight below. Then alone I tied my horses together and led down after them. Two hours farther east, from a second, lower divide, I overlooked another broad open basinlike depression, somewhat similar to those up the river Khod, but more irregular and many times larger, being possibly twelve to fifteen miles across from west to east, and maybe twice that from north to south. Even from where I stood it was evident that, like the others, this was a low granite area surrounded by mountains of more resistant rock. The great saucer-shaped floor of the depression appeared to be gently undulating and unbroken, and uninhabited; but in Afghanistan such appearances are usually deceptive.

Descending along the trail, I came soon upon the granite among

huge fantastically eroded boulders, and by twilight I reached an irregular acre plot of wheat squeezed among the boulders where a feeble spring seeped through the coarse clean sand. This was sure sign of a village somewhere near, and soon I came to it and found my party in bivouac for the night.

It was a lonely little group of huts that nestled there among the boulders, blending with them, where another feeble spring seeped out among the rocks. The people called it Sharan—and seemed proud of the two high watchtowers that they had built above the huts, and of the small, square, high-walled fortress that protects them on the south.

We cooked our evening meal in moonlight by the walls of the fort, and moved on again at dawn. The people of Sharan told us that we should have to cross a large river, tributary to the Helmand, near the village, and obligingly offered to come with us to help. I refused to take them seriously but told them to come along, thinking that a few rupees spent for some fancied service would still be small payment for their wholesome friendliness and hospitality, for from the high divides the day before I had scanned the basin systematically with field glasses and seen no evidence of a major river; and here again, as I rode to a little height about the village, I saw nothing but barren rolling granite plain.

But less than a mile from the village I came suddenly and without warning to the brink of a high bluff, where I was amazed to see the trail drop down a measured thousand feet into a canyon that was invisible from the surface of the plain even a few rods west. The men of Sharan were masters of understatement: In the canyon there was a large river, muddy and swift, and in volume nearly equal to the Khod. They called it the Rud-i-Ranga.

We switchbacked down the crumbling face of the bluff to the canyon floor. There were no rafts, and the Sharan men, whose every word I now respected, said that we must ford the stream. I sent in a scout to test the water, and found it four feet deep over a smooth channel. We piled the loads high on the saddles, and put two men on each of the unloaded horses to weigh them down, and waded through.

Then we climbed a thousand feet up to the level of the plain onto a narrow ridge from which we could look back down into the Ranga, *and forward down into the Helmand, in similar canyons* which join a mile or so below Sharan and enter the gorge from which they emerge united into Ghizao.

During the rest of the day we bore northeast parallel to the Helmand; but instead of the easy travel over a rolling plain that I had anticipated, we walked and climbed and worked at the exhausting task of taking horses down into deep, hot, steep-walled ravines, and out again, and down and up and out and down and up again, until we cried out to Nature for mercy before we had crossed all the side tributaries that drain into the Helmand, each as deeply incised at its mouth as the parent stream.

Late in the afternoon we started climbing a high shoulder of the granite mountain on the north. By sundown we reached the summit, and I let the outfit go on down the forward slope while I set up the plane table for a last sight on the Koh-i-Khurd. Night came before I again drew up with them; but before the twilight faded a bright moon gave light enough to cast a shadow, and we plodded on for two hours longer until we reached the first settlement, a place called Waras.

It had been another trying day for both men and horses. By noon our new recruits had slowed down to the average Afghan pace, and by evening they moved forward only because Waras held prospects of a better meal than our emergency stocks provided. As patiently as possible I urged them on, but in the night they were beyond urging, and when finally we entered Waras and stopped they simply collapsed on the ground, refusing either to unsaddle or to seek food.

In midafternoon I had asked the singing soldier from Dera Hoot—whose sole effort on the march had been to walk beside us carrying his tunic slung from the rifle on his shoulder—to go ahead and have food prepared in Waras for us when we arrived; but he had refused. So after we came there together I bought a goat and paid the villagers to cook it, whereupon by midnight my men aroused themselves sufficiently to eat it all.

The other soldier from Dera Hoot, a better worker, was in

charge of one of our disabled horses. Previously, when we had reached Ghizao, two horses were still casualties from Durmay Pass: one with a first-order fistula, and one simply so done in from overwork and altitude that it was out of action. Since then the first had gained strength enough to keep pace with us without a saddle; but the second had grown weaker, and the soldier had been left behind now to nurse it along. But the terrible trail had proved its undoing, and he reported in at midnight (when the goat was nearly finished) without it. This was the second horse (of my original six) lost on the trail.

Waras, as we saw it when morning came, consisted of no main village, but rather of scattered little groups of huts, each built of stone and mud, flat against the mountain side, amongst small terraced wheat fields in a valley widened out by several small streams that joined below and fell into the Helmand. In the fields, also, were other small circular shelters built with sides of reed matting and roofs of grass held down by stones, not thatched. The people called these their "summer houses." Close by each summer house were other inclosures nearly as large, built exactly like large wicker baskets without lids, which they used as goat corrals. Each group of solid huts was protected by a square mud fort with rifle slots and watchtowers. Simrah explained that these had been built when each village had to defend itself individually from invading Pushtu peoples "over a hundred years ago."

"But they have been only recently constructed," I pointed out to him. "And those bullet holes in the walls are more recent than the fort."

"Well, maybe there have been more recent invasions," he admitted.

On May 11th we marched more easily north from Waras over a mild divide (elevation, 8,500 feet), and down to a village in the upper valley of Ghazoor where we camped early between dark, snow-flecked mountains. Next day we moved east again, back to the Helmand, and then north along it through another broad open granite basin, coming finally by evening to Zarnai, a minor administrative post on the little river Bergan, which is another

north tributary that joins the Helmand in a forked canyon, like the Rangan at Sharan.

From our course through this second granite area we had good views of the Helmand, and here again we found it deeply entrenched in a great, steep-walled, narrow gorge. Gradually now, as my mapping progressed, came the realization that we were rather unwittingly reconnoitering one of the greatest physiological features of the entire country, and one not heretofore recognized. For wherever we reached the Helmand we encountered a great gorge. Some seventy-odd miles to the southwest, where we first lost the river in the southern Helmand Mountains, its channel, as previously stated, is roughly five thousand feet lower than the peaks that rise above it, though the vertical cliffs that stand beside the water there at any one point where we saw them rise only part of this distance. Near Ghizao there is a difference in elevation of roughly ten thousand feet between the river level and the highest peaks of the Koh-i-Khurd, about eighteen miles west. At Sharan, where the river traverses the comparatively low granite basin (Sharan stands at about 5,600 feet), the inner gorge is about one thousand feet deep by aneroid. South of Zarnai the depth of the trench appeared to be considerably greater, though I had no ready means of measuring it since we did not have to cross it. And so rapidly has the trench been cut through the granite here that the few minor side tributaries have been unable to keep pace with the bigger river and end in hanging valleys.

Actually, as we came to see later, the whole upper Helmand River, from its junction in the north with the Panj Ab (or Panjao, or Pitawa Kol) south of Sultan Robat, southwest to the district of Govergin, is lost in a nearly continuous gorge of major proportions, except very locally, as at the hole of Ghizao, where the valley walls bulge out enough not to be called a canyon. This is a distance of more than a hundred air miles, and of course is much more as the river meanders.

Also we were finding that the Helmand's course, never previously charted, is considerably different from that surmised on the existing general maps of the region.

Across the Helmand, from our course through this second granite area, the black, snowcapped range first sighted three days before from the passes west of Sharan now stood full in view bordering the granite on the east. The people of Ghazoor called these mountains the Koh-i-Dia. The range is some thirty-five miles long, with its axis trending northeast-southwest, being parallel to the range of the Koh-i-Kensan but situated *en échelon* north of them.

In and on the west side of the granite area, irregular isolated mountains of limestone on a quartzite base stand in the granite like huge, half-melted icebergs refrozen in a frozen sea. Beyond this, to the north, the country rises in black slate hills to still another great range of mountains trending from northeast to southwest, the Koh-i-Waras.

Most of the country, and particularly the low granite country, is extremely barren and arid and hot, and it appears to be quite uninhabited; but a few springs emerge from the granite, and each spring supports a tiny patch of wheat and a small village, protected by a small fort or blockhouse as in Waras. Full advantage is taken of every unevaporated drop of water that seeps out among the boulders. In little canals it is led along the mountain sides above the cultivated plots, and regularly the canals are opened to irrigate the grain below. At this season all the villagers were in the fields with wooden spades opening one canal, closing another, and guiding the precious liquid to the very base of the wheat stems. So small is the volume in these canals, and so hot and dry the atmosphere, that the loss by evaporation must nearly equal that which seeps back into the soil.

Between the points where springs emerge there is nothing for the nomads, and we saw few of their camps in these districts north of Ghizao.

Our entrance into Zarnai marked our entrance into the Hazarajat. We came there in the hot evening and off-loaded on the broad stoop that makes entrance to the fort, where we ate and slept generously in public exhibition before the stalwart Hazara people who gathered round to watch.

In the morning (May 13th) the Ghizao men and the soldiers from Dera Hoot, their term of service ended, came and asked for

release. I paid them with good will; whereupon, finding themselves thus enriched with unaccustomed silver, the men from Ghizao sought further liquid assets by offering to sell one of their horses.

This was not entirely unexpected, for during the past four days I had watched them gradually grow afraid of their own animal—a strong mountain stallion, fully accustomed to altitude, that we had nicknamed “Wildfire” after his fiery red color and equally fiery temper. When we had left Ghizao, Wildfire was a perfectly normal, well broken pack animal. But he had soon grown irritable under an ill-fitting pack saddle that pressed too heavily on his withers, and under this galling pressure for four unrelieved days on the trail the sore parts had become so tender that he fought every one who approached his shoulders, and the men soon found it necessary to use a blindfold before he could be loaded. Either unaware of the cause or ignorant of the remedy, or both, and also unaware that I had seen the fault, the owners now tried to pawn their troubles. I wanted Wildfire for a second saddle horse, confident that I could cure him; and after I rejected their first offer as a base insult in view of the horse’s broken condition, I got him at a fair figure.

When the deal was made, we blindfolded the horse and replaced the offending pack saddle with my own light riding saddle that left the withers free. Then I mounted and headed him toward a long even field before the fort and removed the blindfold. Wildfire stood bracing himself stiffly with his four legs out like a wooden sawhorse; but when I dropped the reins and touched his withers he reared in a frenzy of fear, fighting a tormentor he could neither see nor reach. When his fit of bucking was ended he started to run. I gave him his head and continued to rub his withers, while he charged on blindly without check until he was nearly winded. Then I reined in and turned him back, still patting his shoulders gently, as I got him under full control before we reached the fort again where the men were waiting to see whether the effort would end in tragedy or triumph.

This business delayed us, but not unprofitably, for I had seen no horses in the districts we were entering, and Wildfire was a good replacement for the one that we had lost.

When the men from the south were gone I called for volunteers among the Hazaras, feeling intuitively that at last we had come among men again instead of children. Several men responded, offering to go a short way with us, and to bring two donkeys, the only transport there available. Another young lad said that he wanted to go to Kabul and would serve as cook if we would let him join us, since he could not travel so far alone.

So our new party was made, and we left in the full heat of the day, without soldier escort, on a trail up the Bergan River that leads finally over the Koh-i-Waras to Panjao in the district of Dei Zengi.

A short distance out on this trail, however, we got reports of a copper deposit in the valley near the old village of Ghaf, and stopped to make investigation, vainly tracing some quartz veins through the granite in search of something more important than the feeble stain of malachite that they contained.

In the evening a strong gale bore down the valley and turned us to shelter in the lee of a crumbling round-topped granite hill where we anchored our ground sheets, having long since learned to sleep with nothing overhead but stars and moon, and nothing either side as shield against the night winds and the prying eyes of villagers who always found our camp.

We breakfasted on two chickens from Ghaf, replaced the donkeys with two oxen and fresh men, and sent the baggage up the Bergan trail. I let them go on without me, confident that in the narrow valley there was only one trail for them to follow. Most of the morning I spent climbing a mountain west of Ghaf with one horse and the plane table to check our map position; then I climbed down and rode on alone, passing out of the granite onto slate, through a very narrow but well cultivated valley where little fortified Hazara villages shared the strips of deep, green alfalfa and the lesser acreage of wheat and rye, and finally onto schistose rocks on the southern flank of the Waras Range.

Two factors had been introduced in the past few days that much influenced both the method and the progress of my work. In the first place, even from two days' acquaintance with the steady Hazara people, I felt free to leave the pack train in their charge

without remaining constantly in sight. This gave me greater range of observation. In the second place, the rock types around the granite batholith were infinitely variable, requiring much closer study before any general classification could be arrived at for purposes of mapping. Fortunately, these fresh conditions were complementary, so that I accomplished more with the same effort; and fortunately, too, the fresh variety lent new interest to a journey that had tended to become tiresome in the monotonously difficult terrain of limestone. Now, with more free time to contemplate such things, I began to see in retrospect how the various rock types, each so different, tended to influence not only our ease and rate of travel, but also our breadth of vision, and even our tempers and dispositions, and the distribution of native populations.

In general, the section that we had encountered between the desert fringe north of Musa Kala and the Waras Mountains consists of a thick series of limestones, infrequently overlain by younger sediments and volcanics, which locally rest on a thin quartzite formation. This in turn lies discordantly on older rocks composed largely of black micaceous slates and schist. All are much folded and broken and tilted, and the older formations, including in some places the limestone too, are intruded by the granite.

The broad expanse of limestone country stands in high, brown cliffs and steep crags, with a profile rugged and sharp and hot below the relatively even south-sloping plain of the old uplifted land surface that the present streams have cut their channels through. These rock surfaces shed little soil, but this little is rich, and where enough of it has accumulated and can be watered good crops are raised. The limestone trails, as we have seen, are rugged too, like the general profile of the landscape. They are generally surfaced by bare rock, angular and sharp, resistant alike to the arid atmosphere and to the unshod feet that travel them. Men and animals go lame travelling over these trails, and men's tempers grow sharp and hot and wild like the country about them.

Where the limestone-quartzite cover is removed and the black slates and schist are exposed, as in the higher country, a different landscape meets the eye. The mountains are as high, and the valleys often as narrow and deep, but there are smooth, convex pro-

files instead of cliffs and ledges. And there is enough soil on these softer slopes to make the rock seem not so hot. Trails are worn deep along the contours of the hills and seldom rest on solid rock. But where the rivers have cut so quickly there are deep, steep-walled canyons, black like the landscape from the color of the rock. One travels over the slate trails and comes in at night tired, but mellow with the satisfaction of having done a fair day's work, and immeasurably fresher than from the limestone trails.

The granite almost everywhere gives rise to the broad, open basins, previously described, which in general outline follow the surface exposure of the granite mass. It is the least resistant of all the rocks, readily disintegrating under the sharp temperature changes of the desert; but it decomposes slowly, and the loose quartz and feldspar grains accumulate as coarse sand. This is not good soil for agriculture, but it is easy to walk on, and clean to sleep on, and hobnails and iron-shod horses grasp easily the bare rock surfaces. We came to like the great, granite basins because we liked to walk on granite, and because our breadth of vision was widened and all things seemed brighter there.

These three main rock types, with their so different soils and environments, largely control the distribution of the native populations. The inhospitable limestone terrain led to constant surprises. In the most desolate wilderness of mountains we found rich fertile gardens—as at Khuni, Kishy, Yakdan, Govergin, and Ghizao—where Nature has managed to concentrate the soil and water, and man has succeeded in bringing them together. In the black slate-schist hills the soil is more generally distributed but poorer, requiring fertilizers. Consequently, the villages are poorer and smaller and more widely scattered. The granite soil is the poorest, the still fresh sand affording little substance yet for plants to draw on, and no quality for retaining water. So the clean, wide granite valleys are sparsely settled.

By evening I reached the little mountain village of Jaoz nestling under a snow-crowned peak that towers over 13,000 feet near the middle of the Waras Range. There my new Hazara cook was grandly established by a blazing fire inside a little smoke-filled hut,

while the horses were picketed outside with borrowed felts, a scant protection from the bitter snow wind that poured down the precipitous slopes above us. I warmed myself by the fire, but soon sought relief from the smoke and slept in the fresher air by our picket line.

Next day we crossed the Waras Mountains through Khonak Pass and descended into Khonak village on the north side of the range, following the trail that winds up north from Jaoz past three other little villages, then zigzags more steeply to 11,400 feet in the pass, and drops sharply and wriggles along the north slope as if reluctant to lose much elevation on a course bound for the higher country still farther north.

It was late in the morning when we started, late in the afternoon when we attained the summit, and late at night when we came to Khonak village.

Fresh animals that had been promised for the morning to relieve our horses did not arrive, and we delayed to wait for them. When they still did not come I loaded our own again. Wildfire delayed us more by his crazy antics, for he still fought the saddle at every starting. For half an hour this morning, while I was adjusting the other loads, I watch the Jaoz men vainly trying to set the blindfold while he reared and fought them off, refusing to submit to amateurs. Somewhat impatient at their timidity, I stepped in and threw a hitch around his nose and tried to hold him down, but he reared again and struck so viciously that both he and I were thrown in a rolling, jumbled heap together down the mountain side. I bruised a knee, and the horse was so shaken that we had him saddled before he quite recovered.

Later, on the trail we found our efforts wasted. For all our pack horses by now were weak and poor-conditioned, and, since they had been bred in the desert lowlands, they were further much distressed here by altitude, and barely able to climb the final grade unburdened. So when some passing bullocks appeared we commandeered the lot and transferred all our loads to them.

The actual climb up the smooth schist slope to the summit was steep but not difficult, affording none of the terror of the lower, rougher limestone passes farther south, and none of the horse-



BARGAINING FOR A RAFT TO CROSS THE HELMAND AT GHIZAO

THE TRAIL THAT LEADS OUT OF GHIZAO





A VILLAGE IN HAZARAJAT

killing climbing and jumping over rocky ledges that we had experienced on those awful trails.

The pass at the very top was drifted full of snow. We stopped in the warm sun under the shelter of the snow bank to breathe the horses for a while, and then pushed through. The baggage went on ahead, while Simrah waited in the pass with two horses, and I climbed up as usual with the plane table to a high lookout point above the trail.

Each of the high passes that we crossed on this northward journey provided a broad panorama of the unexplored districts ahead, and usually there we formed our first general impressions of the route immediately before us. Here from my perch among the snowy crags came my first full view, since leaving Kabul, of the still distant central Afghan highlands, and of other intervening shapeless ranges, in all a cold, wild Alpine scene of hard mountain beauty, mellowed only slightly by the warm orange glow of the evening sun, and softened only slightly by a bed of golden tulips, smaller and more beautiful than the red ones of the Koh-i-Verna, that grew among the rocks around me. Far to the northeast the magnificent white peaks of the Koh-i-Baba, some of them reaching nearly 17,000 feet, stood clear and soft against the thin blue sky like distant, frosted crystals. Still farther to the northwest, toward the sun, the broken ranges by the Hari Rud, and other nearer isolated peaks, cast hazy shadows down toward me; while near at hand again, close beside me on the east and only slightly above my own elevation, the rugged peaks of our Waras Range stood glistening with snow in clear, sharp detail.

Below me on the north, buried in the deep shadows of evening, ran the valley of the Rangan River with its upper source branches feeding on the one hand from the snow on the west slope of the Waras Range, and on the other from lower mountains some distance farther north. Where we had crossed the Rangan near its mouth at Sharan its upper course was not clearly revealed, except that we saw it came down southeast from around the south end of the Koh-i-Waras. Here it was apparent that we should cross it again near its head, and now with its valley in full view I was able to trace its broad sweep, like a scimitar, around the Waras Moun-

tains. Between the head of the Rangan River and the channel of the Helmand River stands the full bulk of the Waras Range, although on the east the Helmand swings close in under the mountains. On most general maps of these regions the Rangan is not recognized as a separate river, and the Helmand is shown following the Rangan valley.

While there was still light I worked on the plane table. Then in the dusk I climbed down to Simrah, waiting, half frozen, in the pass. Darkness settled like a velvet curtain in the narrow valley that we followed down toward Khonak, leaving the pass behind us silhouetted against the even night sky, an unbroken snow bank between two high, black peaks, like a little wad of cotton in an open rifle sight. In places our trail followed the cold stream, or forded it from side to side. Farther down the valley it climbed high again over protruding bluffs. Here we mounted and gave our horses their heads to follow where we could not see, while below us the stream roared on to join the Rangan.

Khonak came to us first as the smell of smoke and horses and manure borne on the cold night wind, then by barking dogs heralding our approach. Again we found our cook steaming rice over an open fire, with our blankets spread on a raised mud platform in the open, and our pack horses picketed in an open courtyard. Other travellers were there too, waiting to cross the pass next morning. We slept beside them on the platform.

At dawn we found ourselves beside a large, square blockhouse overlooking a group of miserably squalid stone huts built around the courtyard. Livestock were corralled inside the court and it was filthy with manure. Men and women and children, sheep and lambs, goats and kids, donkeys and oxen and horses and milch cows all milled about there as the sun came up and warmed their blood. Women from the huts, filthy in rags, milked the goats while children, equally filthy, held them quiet; women from the blockhouse, not so filthy or ragged, milked the cows. Other human beings came from the chill, damp darkness of the huts and sat in the cleansing warmth of the morning sun.

The travellers on our platform departed. A man and his young wife and their small boy crawled from under the pile of rugs where

they had been sleeping, loaded their two horses, and quietly left. The young woman, unveiled, distinctly pretty, and picturesque in her unusual costume of very short skirt over enormous bright red pantaloons gathered tight at her waist and ankles, drew glances from all the men, and disdain from the old hags in the court. A lone bearded traveller, well dressed with black turban and smart, tailored, homespun coat and knee breeches—resembling Revolutionary America more than Central Asia—rolled his blankets and saddled his horse and rode away, probably on some mission from Kabul into the provinces. The cattle were driven from the courtyard while we alone of all the travellers remained for morning tea. Then we packed and moved on, leaving the place quite empty except for a donkey and two old hags who still sat expressionless in the sun.

Our trail during the early morning remained high, leading us through the shadow of the crags and spires that tower above the village, while the fresh sun sent slanting shafts of light above us from between the crags, like taut streamers from the rigging of a ship. As the morning wore on, and the sun flooded the valley of our trail, we progressed down one of the upper branches of the Rangan and then across it and up another—a tributary—from near their junction.

We were still using bullocks and leading our horses, and our march was painfully slow, but not unsteady as the small, short-legged animals plodded faithfully on. But they nearly led to tragedy at the Rangan ford where the swift water lapped almost to their backs and confused them, and one of the Hazara men who waded in to guide them was swept down by the flood, ricochetting from one slippery boulder to another in midstream, until we hauled him out a bare hundred yards above the mouth of the tributary stream below which, without doubt, he would have been gone forever.

All afternoon we climbed gradually up to Waras Pass, the last divide on our way over the Waras Range, only slightly lower than Khonak Pass behind us, but crossed by a smooth even trail between the low, rounded schist hills on either side. Beyond this second pass we came again on Helmand drainage, and soon

descended to the little stone village of Joe Palal, built like a poor man's castle on a marble ledge that juts out from the steep hillside into the narrow valley. Although we were now descending again, the north slopes from the pass brought us into country mildly Alpine in character, and contrasting strongly with the hot valley of the Helmand at Zarnai and Ghaf. Here the season was far behind that south of the mountains, and the winter obviously had been much more severe. The agriculture was different. There were no fruit trees, only poplars near the villages as in Badakhshan. The villagers were plowing for spring wheat in an attempt at dry farming (that is, without irrigation, whereas south of the mountains winter wheat was in full head, and at Kandahar harvest was past. Although it was the middle of May it was still cold. Rotten snowdrifts still filled all the gullies and rested in all the shaded places. We needed our felts and tents again.

And as the physical face of this land, and the climate, contrast strongly with that farther south, so also do the people. We were here nearing the heart of Hazarajat, invading a culture as different from that of the south as if we had crossed an international boundary between foreign races. Indeed we had. For the Hazaras are Mongolian, descendants of Mongolian military colonists settled by Genghis Khan; and, while in their early unsettled beginning they may have taken Persian wives, they have long since ceased intermarriage, and now remain almost racially pure. Nor have they ever been assimilated by the Afghans to any extent in other ways. Although they were finally subjugated, after long resistance, by Amir Abdur Rahman in 1851, they still maintain their own closely knit society in these central mountain districts; and while individually they commonly wander into Kabul, where they often hire out as servants, they usually retain and return to their homes in the Hazarajat.

Physically, they are stronger than the tribes south of Zarnai. Their features and general appearance are Mongolian. The men wear long, thin, drooping mustaches and thin, stringy chin whiskers, though their faces otherwise are beardless. Their dress is unique. Here the turban is a woman's headdress, worn full and

wide, with a long loose end hanging like a veil behind. The women are otherwise unveiled, and look a stranger squarely in the eye. The men, instead of the turban, wear only the small embroidered skullcap which other tribes commonly wear under the turban. Their other garments are usually loose-fitting blouses and pantaloons or knee-length pants, like many Afghan costumes.

In their villages there is much less evidence of religion and more evidence of industry and friendliness and willingness to help a stranger. In many of the villages we heard no mullah's call to evening prayer; instead we found men working in their fields as long as they could see. They left their own work and came with a smile when we asked for help, and some offered help without our asking. But they would never leave their villages far behind.

Their homes consist of groups of stone huts built together, wall to wall, and guarded by a watchtower or blockhouse. All these villages are filthy with manure which they allow to accumulate from cattle in the courtyard during winter, and carry away in baskets on bullock back and spread on their thin fields before they plow in spring.

They use the common Afghan plow, consisting of a hollow pointed cone of iron fastened onto the end of a log, and so arranged that it can be guided when oxen drag it through the ground. This breaks up and aerates the soil but does not turn it over. The rest of their work in the fields, like that of the Afghans, is done by hand. This form of agriculture, sufficient in the more fertile valleys, affords a bare subsistence on the poorer highlands, and is supplemented by herds of goats and a few sheep. Beef animals are common in these upland villages, but horses are seldom used.

We remained in Joe Palal one day while I did map work on a ground sheet spread under the stingy shade of a little clump of thin poplars. Then, on May 18th, we moved slowly down our narrow valley to the river Panjao (or Pitawa Kol, as some have called it), a strong north tributary of the Helmand whose valley terminates the Waras Range. We reached the river a little way above Sultan Robat, but could not cross, and so continued up the west bank above the mouth of the Binic Gao, the main west fork

of the river. This stream we forded, and our way then continued north through the Panjao gorge, and brought us, on the second day, to the settlement of Panjao, the administrative center of the district of Dei Zengi, the seat of government for most of the Hazarajat, and one of the most important strategic fortresses on the highroad across Afghanistan between Kabul and Herat.

CHAPTER XII

ON THE HIGHROAD ACROSS AFGHANISTAN

PANJAO is typical of the present Afghanistan, where the old prevails, the new intrudes, and the people remain unchanged.

On a little plain on the east bank of the river stands an ancient adobe fortress, crumbling in decay and open to passers-by. A few poorly furnished shops occupy some of the inner rooms, and men congregate there to loiter and gossip and smoke.

Beside this old structure stands a great, new fortress, also of adobe, but thick and solid and firm, and garrisoned with provincial troops, protecting not only the highroad east to Kabul, but also an important road north over the Koh-i-Baba through Bamian to the Kabul-Khanabad caravan trail.

Around the shoulder of a hill behind the fort the old camel trail from Uni Pass is being widened and graded in anticipation of motor traffic.

Across the river, by the opposite bank, is one of a new net of radio stations that the central government is constructing (under British Marconi supervision) to bring these provincial capitals in nearer touch with Kabul.

But the new fortress is outmoded; the soldiers' arms are obsolete; the road is poorly graded, wrongly banked, and unfinished; the radio station has not functioned since the British engineer was recalled and the Afghan who replaced him forgot to drain the generating motor, allowing it to freeze and crack a casing.

In the meantime, the valley of the "five waters" is thickly dotted with black nomad tents as it has been twice each year since men first herded sheep.

We came there in the early afternoon, trudging wearily in the hot sun under a clear blue sky that grudgingly floated a few white

clouds around the Koh-i-Baba peaks. Like our horses we were getting tired and moved slowly.

At the radio station, which we came to first, Simrah recognized the lone operator as an old school friend from Kabul. The two men embraced like favorite brothers; our welcome seemed assured. Of course we should make his station our home, the operator said, and relieve him of his intolerable loneliness. There was an extra room, and he had nothing to do save sit and wait for repairs to his motor. I should also make my office there, he charged, for as engineers we should certainly find much in common.

And so we stopped and off-loaded at the station, and drank tea together until evening.

We sent a messenger across the river bearing our respects to the governor, with a letter explaining who we were. His reply came back at once, also cordial in greeting, and weighed heavily with official welcome and an invitation for us to billet at the fort, though he added a postscript stating that the radio station offered the better quarters, and that probably we were most comfortable where we were.

Next day I worked on maps, grateful for a table and a sheltered room, and the privacy of the station which ordinary folks were not allowed to enter. Simrah and Osis slept in the sun, arousing themselves only to drink tea at regular intervals. The horses drooped in the sun, or rolled in the dust, too weary to graze until evening after we led them down to water.

Shortly before prayer time the governor—a handsome, restless, soldierly fellow in his early thirties—rode across the river with his secretary, a mullah, and a cavalcade of troopers, to pay a call. They dismounted with a flourish, gave their horses into the charge of several luckless gapers who of the gathering crowd stood nearest, and strolled up to the station, where the guard formed undressed line and stood at ease.

Their visit was unannounced, a great honor both to us and to the nervous little radio man who fluttered about clearing my maps from his only table, and finding chairs—furniture seldom used but demanded by officialdom.

Tea was served out of doors, with the guard advanced in line behind our table. Our meeting was easy and informal, our conversation entirely to my liking—since it avoided the weather, barely mentioned my work and our travels, and dwelt mainly on the harmless subject of horses and rifles, which each of us understood. In line with this, his main interest, the governor had with him a little Russian .22 target rifle and a pocketful of ammunition, and between sips of tea (too hastily brewed by our flustered host) he kept the officer of the guard busy setting up pebbles for him to shoot down at twenty yards from the table, while he spoke to us from the corner of his mouth, and the secretary kept tally at his side.

The shooting continued until it was too dark to see the rifle sights, the mullah discreetly delaying prayer till then. But when the rifle was finally laid aside this worthy mufti then made up for time in loudness, and, cupping his hands, he called all ye faithful with such volume as to reach the soldiers across the river. The party then arose, and the soldiers of the guard broke ranks without an order, and all paid tardy homage to Allah, and their Prophet.

With this duty done, and darkness falling rapidly, the masterful governor invited us to dine with him—much as a monarch might spontaneously invite his jester to perform. Our acceptance, of course, was certain, and before I had a chance to call little Osis (who all this time had been watching us from behind a corner of the building) for my horse, the soldiers nabbed some passing animals on which we rode across the river to the fort, leaving their dismounted owners to wade the stream.

We passed through the great entrance of the fortress riding two abreast, and dismounted in the dark inner courtyard. Soldiers came alert everywhere. One brought an oil lantern and ran ahead of us, others took our horses, and still others followed us through the several narrow doorways where the light had passed. We climbed a winding stair in darkness and came finally to a white-washed room where lamps were burning, a very livable bachelor's room—one end taken up by a large four-poster bed under a mosquito net, the rest thickly carpeted, with quilted bolsters on the

floor to recline upon, and books (in Persian) neatly stacked in indentations in the thick mud walls. Drapes covered two entrances, but there were no windows or other ventilation.

The cooks had been forewarned, and with his usual directness our host called for food. Three soldiers, with loaded cartridge belts and bandoleers, came bearing trays as waiters. Another stood by to see that all went right. And then, sitting cross-legged on the floor where the food was spread, we feasted on all the good things of Afghanistan, ending with cigarettes, and sweet tea in silver service, with a soldier ever near to fill our cups until finally, one by one, we turned them over.

Next morning, with Simrah dull from too much food and smoke, but Osis fit for service, and the horses somewhat rested, I secured a blacksmith from the fort to tend our horses, and left the three of them to do the task. Then I went out alone to map the Panjao hills.

When I returned to the station in the evening the governor and his party again were there. I had half expected them. Having learned of his fondness for rifle shooting the night before, and knowing the rate at which every detail of a stranger spreads, I knew that he had heard of my rifle (always of much interest to the Afghans) and was most curious to see it. But I had not produced it, preferring to wait until he asked.

My guess was right; before the tea was poured he asked to see my gun, and before the mullah's prayer call saved what little I had left, he shot away most of my ammunition at targets on the distant hillsides.

Before he returned to the fort the governor asked when we were leaving, adding whimsically, with a wink for me alone, but in hearing of our station host, that he had understood we were stopping for one night only, and already we had been there two.

I knew of what he spoke. Throughout the evening the little radio man had been moody and quiet, and earlier in the evening it was whispered to me of his complaining to the governor that the Dei Zengi radio station was no hotel; so I replied that my work was nearly finished.

Afghan hospitality, so widely heralded, has a flavor all its own.

It often intoxicates the newcomer with sweetness, but leaves him with a headache afterwards. The Afghans are hospitable, truly very hospitable, but one is expected to use discretion in accepting that which is paraded in the garb of hospitality. If a village chieftain invites a stranger to spend the night in his village, the courteous thing is to accept, for the invitation may involve the safety of the chief as well as the men invited. But if an official invites you to ride his prize stallion you may very well be expected to smile sweetly and thank him profusely, but stay off the horse. If you do ride the horse it may not be offered again.

When the little radio operator greeted us as long lost brothers, and offered us his all, he expected that we would take a cup of tea with him, and possibly spend one night, and then thank him for all the other things which he so kindly offered, but which we, unfortunately, were unable to accept. I knew that of course, but I had work to do at Panjao and needed a room to do it in and was entitled to government facilities, and to his consternation I accepted fully his invitation. Thereby, possibly, I had worn out my welcome, and lost a doubtful friend. What might have taken place between Simrah (a person very sensitive, and often ill tempered) and his old friend while I was away, or what else might have caused his changed demeanor, I never knew.

This, probably, is only half the story. The other half is that the people in Panjao refused to accept us fully for what we were. They read my letters from Kabul and Kandahar stating that we were a government party, and instructing all people in the provinces to assist us in every way. They accepted that. But they had never seen any one of any importance arrive in such a state as we were in. After a winter and spring of hard campaigning, our clothes were worn threadbare, and we had no tents, our horses looked like kite bait, and what little outfit we still had was worn and patched and battered. Only my instruments and guns made some favorable impression. The story that we told of having been in the field since midwinter, and of having explored and mapped Ghor and Gulistan and the Helmand valley from Girishk, impressed them little. True, no Afghan or foreigner had ever accomplished that before. But that meant little to the people there.

After all, it might be just another campfire story—and if we really were of much importance we would not have subjected ourselves to such punishment either. Their own officials travel like princes, with a retinue of servants, and commandeer all they want along the way. It is true that they seldom leave the easy trails, and few of them can make or read a map. But they do put on a good show, and the people like it and expect it of all other men of rank. The British (and other) Legation staffs in Kabul know this and act accordingly. We should have arrived more pompously, pitched colored tents beside the fort, and spread rich carpets, and been served by many servants, and done no work at all.

As it was, bazaar gossip made us horse thieves before we left, and when, in a light mood, I unwittingly suggested trading horses with some nomads camped beside the river, they refused to talk to me, answering sullenly that they had no need for stolen animals.

Under the circumstances, on the third morning, I ordered the outfit on the trail again, while I remained alone to finish what little mapping there was left to do near by. Later I returned to the station, where a mounted soldier from the fort was waiting to accompany me, and together we galloped after the pack outfit.

Before we had gone a mile, however, my horse threw a shoe and started to go lame, and to my surprise I found that his old shoes had not been changed. When we came up to the pack outfit several miles farther on I examined the other horses and found that not one of them had been reshod, although I had left Simrah and Osis in camp one full day with a blacksmith who was hired for that purpose.

Thoroughly annoyed, I questioned Simrah—whereupon he immediately exploded with long pent-up wrath, screaming that he was “not the servant of horses, nor the dog of an American,” and that he would no longer submit to the dishonor of such menial assignments as supervising a blacksmith engaged in shoeing horses. Obviously he was smarting from some real or fancied rebuff in Panjao.

Tempers were getting short, and I held mine as best I could. A little cross-questioning later, however, disclosed what appar-

ently had happened. After I had engaged the blacksmith, and bought some shoes and nails, and left the two of them together, they had gotten into an argument about money, Simrah refusing to pay all that the smith was asking. So the work was not done, though I was led to believe that it was.

The horses were unfit in this condition for a journey over Uni Pass, and I ordered them back to Panjao for new shoes. But then the soldier with me intervened, saying that he knew a blacksmith in a village *do krwo* (three and a half miles) ahead, who could shoe horses.

"And if he is not there will you do the work?" I asked.

He said that he would, so we rode on to the village. There was no blacksmith there.

We were then near Kala Nao, east of Panjao, where rough highlands mask the Helmand valley south of the trail. I wanted to examine the geologic section there, so I handed the barefoot horses to the soldier and held him to his promise, while I rode south to reconnoiter. When I returned in the evening three of the horses were reshod, and together we finished the others in the night.

Long before morning we were awakened in our roadside bivouac by the old familiar sound of nomads on the march. After entering Ghizao we had seen few of them until we reached Panjao. But there the valley was dotted with their tents, and each morning as they moved on westward others took their place. The trail east from Panjao was also crowded with them, in many places completely blocked by their cautious camels. This morning they continued to pass until long after the sun rose over Gao Gardan Pass ahead of us. Like an endless, slow-moving army, they passed, marching in companies of ten to fifty camels, with flocks of a hundred to several hundred sheep and goats, and squads of men, and of women and children, and of girls. Each company marched even-distanced from the one ahead, forming a dust cloud that drifted lazily with the moving column. Occasionally a man on horseback rode with the bands, but mostly the men were on foot, walking in small groups together, armed but otherwise unhampered, like African natives who go first on the trail with

spear and ax to guard their women who follow with the burdens.

These people, though their habits and life are much the same, differ in many respects from the nomads of the south. They come from Khost and Jalabad, and the general border country south of Khyber, to summer in Chakhcharan along the upper Hari Rud. The men are huge, dark-skinned, Semitic fellows, with thick, full black beards. The women are thin and strong and wiry. And for the first time in Afghanistan I saw among these people the faces of pretty girls between the ages of sixteen and twenty-four.

These girls marched three or four together, driving flocks, leaving the men free to bear arms. They made no pretense of covering their faces when we passed near them. Many of them were distinctly pretty, most of them being brunette, some lighter, while a few were nearly blonde. They all wore long full skirts, patched with cloth of many colors, like crazy quilts. A scarf, drawn tight around the forehead, was left hanging free behind. Like so many of these gypsies they were much ornamented with silver. Many spoiled their appearance by carrying wooden bowls or cooking pots inverted, like helmets, on their heads. These girls were unmarried. In these tribes a girl must wait until her father gives consent, and the father usually believes that a girl is better without a husband until she is past twenty. He also believes that she will be happier with her mate if she chooses him herself. Their custom of courtship and marriage therefore is much the same as ours.

Each of these mixed bands of nomads constitutes a family as well as a tribe. For marriage through the ages has commonly taken place only between members of the same band, between boys and girls who grew up together as their tents were moved on from day to day along the endless trail. Sisters and brothers were never permitted to marry of course, nor two who were suckled by the same woman, regardless of parentage. But cousins were permitted to marry, and intermarriage consequently must have played a great part in molding the present characteristics of the different groups, all the individuals of which, in many instances, now appear strikingly consanguineous. More recently, it is said, marriage has been permitted with the village people.

Surely these pretty unveiled daughters must never lack an opportunity. And surely a village youth, if he has been a good boy and never seen a pretty girl's coy glance, must be susceptible when they march past his village, unless the mystery behind the village daughter's veil proves stronger.

All these nomads were armed, as those in the south were not. The men all carried daggers at their waists—Khyber blades with bone or ivory handles, or wooden-handled ones fashioned from plundered English bayonets; and one or more of the men in each group, and all the men and even the women too in other groups, carried rifles and wore heavy, loaded, double cartridge belts. Many of their rifles were modern English Lee-Enfields, some were obsolete Martini-Henrys, others were the products of the Afghan factories in the border hills.

This speaks for the country from whence these people came—the Afghan mountain land along India's Northwest Frontier south of Khyber. It also spoke, we soon learned, of revolution and civil war that had broken out in the southeastern provinces since we had left Kabul. This is the land where raids are constantly in progress, and where a man still settles his arguments, and his neighbor's fate, with a rifle; where women and girls wear bright red pantaloons to distinguish them at a distance from the men and boys, so as not to be shot by mistake (since the men have agreed not to kill one another's women); and where the people are still taught by the mullahs that Heaven will be theirs if they kill an infidel, or if in fighting an infidel should succeed in killing them. Any infidel is a worthy prize, but an English infidel is especially coveted. So the raids across the border into British India are organized not alone to steal rifles, but also to offer the young Afghan an opportunity by this means to win eternal salvation. And Heaven means to him a haven where he will not have to do as much work even as he does in his mountain village, and where he will be served, and all his desires eagerly satisfied by angels in the form of pretty girls.

In discussing these raids with an educated Afghan once I asked whether the mullahs granted the Englishman an equal right to heavenly joy if he, in self-defense, killed an Afghan.

"Certainly not," he answered. "How could an Englishman possibly get to Heaven!"

But not only the infidels suffer in these districts. It is considered a noble, sporting feat to kill any man from ambush, if the killing is justified by blood feud, much as some of our hunters consider it sporting to kill big game from ambush, or the safety of a blind or boat.

Not all Afghans, as we have seen, are like these border people. Those north of the Hindu Kush, for example, are not nearly so ready to fight. The Kabul government probably wishes that they were, for the warlike tribes in the east and south have proved a good defense against the British Lion. If people like them lived along the Oxus River, Kabul might feel safer from the Russian Bear. Actually, in pursuance of this wish, it is said that some of the warlike people of the southeast have been carefully selected and subtly transplanted to the Oxus region, beguiled by grants of land as reward for some service that the government chose to recognize. It is hoped that they will intermarry with the northern people, and that the next hybrid generation will inherit some of the fighting blood of their southern parents. Let's hope for the sake of Kabul that the more docile blood of the north does not contain the dominant inherited characteristics.

On May 24th, when the horses were all fit again, I sent Simrah ahead with the pack train under orders to camp at the first village beyond Gao Gardan Pass, while I took the mounted soldier and one pack mule (that we had taken from Panjao), and set out with the plane table to reach a lookout from which I could again see the Helmand valley and bring up my survey of its course—my last sight of it having been from Zarnai, forty miles south from here. For Simrah this was an easy assignment, since this part of the high trail is like a broad avenue, wide enough for lorry traffic, and gently graded. But for us it was a big order, involving a long ride and much climbing where there were no trails. We ascended the ridge that trends southwest from Gao Gardan Pass and followed it steadily to snow line, and then swung south toward the summit. About noon the soldier began to lag, complaining, with much compassion, that his horse was tired and needed rest. When



EARLY MORNING IN KHONAK VILLAGE—HAZARAJAT



NOMADS WEST OF UNI PASS ON THE HIGH ROAD ACROSS AFGHANISTAN

I compared the two, however, it was evident that the man, and not the horse, was the one who most wished to stop. There was still a long way to go, and trying to hurry an unwilling Afghan is much like trying to race a horse with a ball and chain on both front feet. So I told the soldier to wait beside the trail till I returned, while I took the mule with the plane table in lead and rode on alone.

In splendid solitude I wound up over soil-covered slopes, among the last snowdrifts of winter, as far as I could ride. I secured the animals in a sheltered cleft, and climbed with the instruments the last rough mile to a peak that overlooks the Helmand, where I anchored the tripod with stones against the cold gale that was attacking briskly from the Koh-i-Baba.

The shadows below me were long before I finished my triangulation and climbed down to the animals, and twilight was fading before I reached the spot of parting with the soldier. He was gone.

I tied the mule's lead to my cantle and rode hard ahead to reach the trail at the pass before darkness settled, but the last light of day failed and a moonless night began while I was still in the mountains. In the flat southern desert I could set my night course on a star and follow it. But such practice here would soon have led to disaster in some deep ravine or over the broken edge of some blind cliff, for the darkness was as thick and black as lava and there was no trail to follow.

I dismounted and led with a long lead, so that if I slipped over a ledge the horse would not go down with me and I could cling to the halter rope. Thus we inched our way along, keeping always to the highest ground, helping each other to find the best footing; for in some places the horse's eyes were better than mine, while in other places I saw where he could not see.

Before we reached the pass we knew that it was near by the sound of shepherds whistling softly to their flocks to keep them moving on the trail. I spoke to one, as we passed near without seeing each other in the night, but his reply was a brusque "Move on." This I did, and came soon to the trail on the summit of the pass where his sheep had crossed.

From there our way was encouragingly easy down a broad, smooth road. Sleeping nomad camps were everywhere beside the way, their fires dead, their camels resting by the tents. But their many dogs, like good sentinels, were much alert, and maintained a continuous chorus as I passed along. Their first gruff warning bark came as we approached the nearest tents; then it was taken up all down the line, until, encouraged by one another's noise, the dogs grew bolder and formed a pack, and came out in the road to meet us. They attacked the lead horse first, and then converged on me. With nothing in my hands to beat them off, I fired a revolver shot into their midst, sending them scattering again among the tents from where they kept up a vicious noise until we passed.

Some time after midnight I overtook my soldier companion of the morning, riding slowly down the trail in stately manner with a personal bodyguard of two men accompanying him on foot. These men in uniform are authorized, or assume the authority, to command any one they pass to serve or help them. I reflected that he had been assigned to help me, and so handed him the mule to lead, but he ordered one of the footmen to take it. I then mounted and we rode on together in silence, with the two strangers following, until we found our own camp sleeping by the way some miles ahead.

Next day we moved on eastward following the highroad over the top of Asia. Many labor gangs were working on the trail, digging, grading, filling, and building retaining walls, trying hard to convert this ancient caravan route into a modern motor road. But they were poorly supervised, most of the men on the job having seldom seen a motorcar and never experienced greater weights than loaded camels. The uncemented walls they build to hold the terraced road against the mountain side will probably cave under heavy traffic; the hairpin turns are too sharp, and their grades too steep for a motor's power. Most of the labor at work was local, as each near village or each district in general is ordered to complete a section, until the whole is improved and connected. The men, although forced to do the work, were said to receive two afghani rupees (about twenty cents) per day from the government, and

another from the people of their own village who elect them to render the required service.

Through this section, as for some time past, I let it be known that our horses were for sale if any one was interested. West of Uni Pass prices are much higher than in Kabul; I knew that I should have to dispose of the horses in Kabul anyway, and along this main route it was comparatively easy to hire transport animals. My attempt to enter trade, however, was only indirect and half-hearted, for, in the case of a foreigner at least, it was in some respects considered undignified to sell, though perfectly dignified to buy. I had in mind more using this as a means of gaining a closer understanding of the mixed peoples we were passing through, for through trade one generally comes closer to the heart and mind of people than by any other way. Of course I made no sale. Many buyers came at different times, both from the villages and from the nomad camps; but the highest prices ever offered were about one-sixth of what I had paid. I made a game of it finally, and tried trading animals; and then in the same districts, with different individuals, pretended that I wished to buy. In this case, the prices asked were about the same as I had paid in Farrah and Sabzawar.

Their terms were usually about as follows: "I will give you a hundred afghanis for your horse. It is only an ordinary horse, and it has been worked hard, and is very thin, and that is all that I can afford to pay. You want to buy *my* horse? Mine is no better than yours, of course, but it has not been worked recently, and is fatter than yours. I myself paid eight hundred afghanis for it, and a man behind that mountain has offered me twelve hundred for it. I will agree to sell it to you for that amount. No, I do not wish to trade horses, I would not even give you my horse for two of yours." Profiteering is an honorable practice there, as everywhere, and if one feels that he has an advantage he demands his pound of flesh.

In many of the isolated valleys, on the other hand, the art of trading for profit is not developed. For instance, I had always heard that the Hazarajat is the place to find good Afghan felt, and, since I wanted some, I was watching for it in the villages that

we passed through. I saw some very fine pieces in the villages near Waras Pass, and tried to buy them. But both Simrah and the villagers assured me that I would see much better in the bazaar at Panjao. When we got there I found no felt at all. Suspecting that I was about to duplicate a similar futile search for dry-tanned "deerskin" moccasins in Badakhshan, I mentioned to the Panjao governor during one of our conversations that I would like to buy a piece of good felt. He said that the very best place to find it was a certain village farther along our trail toward Uni Pass, and that he would send a messenger there to have some waiting for us. Of course at the appointed village no one had ever heard of the governor's messenger, or my desire for felt. The villagers there, not knowing from whence we came, said that the very best place to find good felt was back near Waras Pass.

Commonly, in these isolated districts, when one wishes to buy an article, one is told either that much better can be found elsewhere, or else that it is the wrong season to buy. There are probably two reasons for this. First, one can seldom go into a shop (even where there are shops), and select such articles as felt, or "deerskin" boots. These things ordinarily are not for sale. They are made only by the individuals, or families, who expect to use them, and it is necessary to persuade these individuals to part with personal belongings that they need for themselves. Again, certain villages gain reputations, often unjustified, of producing the best articles. A village woman some winter may outdo herself, and by unusually hard work produce an exceptionally fine piece of felt. Thereafter her village becomes known as "the home of the very best," regardless of the quality of past or future products. Often when we were directed somewhere else to find what we wanted, it was to some such "home of the very best." More often, however, on such occasions, it was probably only the desire to be rid of a nuisance that prompted them to direct us elsewhere. For generally they have only what they need, and they do not want it taken from them. The idea of selling what they have for a profit, or as a means of converting labor into wealth, and then making new for themselves, is either not considered or not appealing.

By the evening of May 25th, from where we off-loaded on a

little level patch of moss beside the way, we were again within sight of the Helmand to the south of us. Local rain squalls and cold wind sent us under our blankets early, and heavier rain during the night wet us, and we dressed and packed in rain the following morning, with mud all about except where our beds had dried the earth. We started marching early to warm our benumbed muscles, and within an hour descended to the narrow Helmand, where the road crosses by the only bridge over the river north of Girishk, the second bridge only north of the stream's end in a desert marsh in sandy Seistan. Beyond the river the road swings in a broad sweep to the southeast; but we chose a trail following along the north bank of the river and pressed on eastward.

The day continued blustery, and our efforts were spent pushing against the storm, marching quietly, with bowed heads to shield our faces from the biting wind. So we rode till afternoon, between the Helmand and the Koh-i-Baba, when I sent the soldier on ahead to seek some substantial shelter for the night.

In the evening he returned on the trail to meet us, having found billets in the old adobe castle of Jang Kala—the stronghold of a local khan who was killed in the fighting in 1929, when Hazara volunteers successfully defended Uni Pass against the hordes of Bacha Sakao the "Bandit King," who attempted to subjugate them.

We left the river and pushed on up a small north tributary to the castle walls, and passed in through the tunnellike entrance common to such fortified villages. Inside the courtyard we unsaddled our steaming animals, while a flock of sheep which had been corralled there were driven into the lower chambers under the living quarters, and all the village folk came out to help. I was assigned to the old khan's private chamber, a room high up on the outside wall, barren of furniture but cleanly carpeted with felt, and entered by a dark, narrow winding stair, where I found delightful respite both from the storm outside and from my inquisitive hosts within.

In Jang Kala, that night, we were told of mines on the southern slopes of the Koh-i-Baba, one day's ride to the northward, and I

arranged for a guide to go there with us. Accordingly, the following morning I sent the pack train on up the Helmand to a designated village, while Simrah and I followed the guide north toward the mountains. The Helmand valley in this district is broad and open, with the clear swift stream entrenched in schist, and bounded by terraced gravel fill. Emerging from under the gravel, the low, red, jumbled Surkhabad Mountains pile up helter-skelter on the south, while on the north mixed clay and boulder piles, probably carried or pushed in by former glaciers, lead up to the foothill region behind which the magnificent snow-clad Koh-i-Baba range rises sharply, dominating the whole valley with its natural splendor, like a chain of high white crystal palaces above a moor.

The storm of the previous day was past, and we rode leisurely together under a clear sun, coming by evening to the site of the mine just under snow line, near the head of the little stream Marak, which washes through the till to join the Helmand. I scouted out the prospect until darkness sent me down, while Simrah and the guide persuaded the men at a little near-by village to cook a chicken for our supper.

In the morning we saddled up at sunrise, and I started out on a southeast trail to rejoin my outfit on the Helmand. But then Simrah rode up and said that there was another mine for me to see. I had questioned both the guide and the villagers about other mines the night before, and they had all told me then that there were no others. Now they said that there was another, and the guide said that he knew just where it was, and that he would take me to it. I would have gone over the Koh-i-Baba, if necessary, to find a mine, and so I followed him. We left the trail and rode for an hour up a small stream toward the snow again. Then, far up in the foothills, the guide stopped and said that beyond that point he no longer knew the way. Such illogical contradictions are common in Afghanistan. Last night the guide knew of no other mine; this morning he did know of another, and voluntarily offered to take me to it; now, a few hours later, again he didn't know.

"He has been thinking," Simrah remarked, "that if we find a mine here other men will come, and the peace and quiet of his valley will then be spoiled. He is now lying to us."

I urged the fellow to search his memory. But he remained steadfast in his loss of it. I tried to bribe him. But he proved immune to bribes. Together we tried to bully him. But he only became more obstinate. Then, when he saw us so persistent, he struck on a brilliantly hollow strategy. His memory suddenly came alive again; he said that he had just recalled where the mine was located. We were already to it. He stalked to a dark carbonaceous shale outcrop that stood in strong color contrast to the yellow shale on either side.

"This is the mine," he said.

We tried to get some near-by villagers to lead us on. But the guide spoke quietly to them before they responded, and then they confirmed his story. That was the mine.

I turned back. The guide and his recently acquired confederates remained behind with poker faces. Simrah was embarrassed. I was content only in the knowledge that not so very long ago, under the former weaker governments, these same people would have quelled my curiosity for mines with a rifle bullet in the back.

As we rode back to the Helmand the patriotic, nationalistic, race-conscious Simrah asked if "we" could not find mines without being shown them by the villagers. We could, of course, if we had time to search each mountain stream and every tributary, a lifetime's work for an army of prospectors. I asked him who he thought would do this work. Certainly the common people with whom we had been dealing would not do it. They are the very ones who most obstructed us. The educated class in Kabul would never do it. They believe that such work is degrading, that their education entitles them to a softer life. Like some of us they seem to take education as a license to labor less, rather than as a tool with which they might more easily contribute greater work. I pointed out to him that already he had told me, as had Smala before him, that he did not intend to follow such a life; that he would return to office work when we arrived back in Kabul. Who then is left?

"You," he answered.

The foreigner! The infidel whom every Afghan heartily dislikes, distrusts, and fears! The government apparently recognizes this. That is why I was there. And as I watch the government's

attempts to build a new progressive nation, I see them stumbling over the same obstacles that I had stumbled over while marching into Ghor and up the Helmand River. Their first big job, if they wish to imitate the West, is to teach their people how to work, and not to be ashamed of work, and then to give them some reward for work. Their Prophet forgot to teach them that. Or perhaps, if living, he would not wish for them to imitate the West, preferring rather the luxury of leisure that their agrarianism provides more fully than our Western industrialism.

Regardless of how the Prophet might react to present circumstances, it remains true that the progressive elements in the country now have a burning desire, first to increase the national wealth, and then to industrialize for strength, and then (perhaps) to conquer. Even now, as for years past, the less levelheaded subleaders and their followers sit poised on the hot border ranges, longing and ready to gather the petty border raids once again into a combined aggressive conquest of India at the first sign of weakening of the British defenses. And there is hardly a man in the country who does not believe that this renaissance of past glory will not come to pass, possibly even within his own lifetime. They make no secret of it, but talk openly of their great future role in Asia. One enthusiastic patriot from Kabul even outlined to me the future form of the Afghan navy. "And you will float it on Lake Shiwa, in Badakhshan?" I queried innocently. "No, rather on the Indian Ocean, after we have conquered the Indus valley and Karachi and Bombay," he answered in all seriousness.

After an afternoon of such talk while we trotted along together, Simrah and I came back to the Helmand trail by evening, and then rode on to the village where our packers should have been waiting for us. As usual they were not there. The villagers said that our cook had taken it upon himself to go on eight miles farther to the next village. Perhaps they think they are doing right. Or perhaps they misunderstand, or don't care, or only want to demonstrate their stubborn independence. The fact remains that the rank and file of the Afghan men seldom follow instructions, know not the meaning of obedience, and, like so many other people, have little respect for authority not strongly backed

by force. As a consequence, now, as so often before, there was a long night trek ahead of us, and we marched on, again leading our horses in darkness.

We did not particularly mind the night march—we were nearing Uni Pass, and the headwaters of the Helmand, and we were all anxious to reach Kabul. But we were hungry; all day we had ridden in anticipation of a hot meal of mutton stew from the large fat-tailed sheep that I had purchased the day before and left with the cook, and now, in such a frame of mind, an additional eight miles indeed seemed very far to walk because a cook had disobeyed!

Finally we reached the village where they were said to have stopped, and called for our men. They answered from the dark depths of the valley below the trail, where we found them sitting round their water-pipe, all our kit piled in disorder outside a hut, the horses unhaltered and unattended. We asked our cook for food, but there was none. The men had finished the sheep the day before. There was no bread; no tea. I aroused the villagers and paid them to boil some goat's milk for me, and with that I went to sleep on my saddle outside the hut and dreamed that I was in the Berkeley Grill in London. But when morning came, and I saw in daylight where we had spent the night, I lost all appetite for food and moved the party out at once. It was a filthy place.

On May 29th we camped beside the small Helmand for the last time; on the 30th we crossed it, and climbed without incident to the caravanserai at Jao Kol, under Uni Pass, where we slept on the flat roof in a numbing west wind from the Koh-i-Baba snows.

Early the following morning we climbed the pass and crossed over from Helmand to Kabul River drainage and started down to Kabul City—and to summer. For east of Uni Pass, in the valley of the upper Kabul, the season jumped ahead again as abruptly as it had been reversed the day we crossed the Waras Mountains at Waras Pass. Here again we found the warmth of early summer, roses and rye in bloom and, farther down the valley, mulberries ripening on the trees.

The end of our journey was now almost in sight. We tried to reach the town of Arghandeh by the last night in May. But by

this time three of our pack horses had become so feeble that they could barely keep pace with us on foot, and near the village of Mamaki, several miles up the valley, their progress became so painfully slow that we stopped near the large house of a local khan to rest them for the night.

There, rather unexpectedly since we were so near the strong arm of Kabul, I was immediately approached by the old khan, and also by soldiers from the local garrison, and urged not to sleep beside the highway. The soldiers insisted that we return to Mamaki and the protection of their garrison, and the khan insisted that we share his house. It was the old story, heard so often before from petty village chieftains in the wild desert and mountain districts far to the south and west. The khan had enemies who would kill me! They argued among themselves as to where I should go; and again, foolishly no doubt, I remained where I was—outside beneath the stars, enchanted completely by the warm, balmy fragrance of the summer night, and reluctant to trade it once more for the musty confinement of old adobe castle walls.

On June 1st, Simrah and I mounted the two strongest horses and rode on ahead, leaving the weaker ones to follow with our little baggage. In the dusty heat of early afternoon we entered the outskirts of Kabul, and soon after we passed the ancient wall and rode into the old city, where water shovellers leaned on their wooden spades and squinted to discern the tribe from which we came; and turbaned Afghan dandies walked proudly with women in purdah riding on donkeys at their side; and soldiers ambled casually with measured carelessness among the throngs of other mounted men, and camels, and the city men on foot who filled the street; and one-horse tongas clanged noisy bells to beg a passage through the crowd.

Soon we were absorbed by the crowds. And then, suddenly, now that my sojourn among them was nearly ended, I felt very close to them, as one feels toward very near friends when, at parting, all the little trials and joys and hardships that have been borne together flood the memory, mixed with regret that they cannot go on forever.

GEOGRAPHICAL DIRECTORY

- Ab-i-Khasar, river, 124
 Ab-i-Pew, river, 89, 96. *See also* Talikhan River.
 Adraskand Rud, 133, 157
 Ali Masjid, Fort, India, 6
 Amu Daria, river, 3, 26, 38, 43n., 44, 64, 67, 106, 114; valley, 35, 98. *See also* Oxus River.
 Ana, 176, 177
 Anjuman, vi, 46, 71, 77-84 *passim*, 87, 95, 108, 164
 Anjuman Pass, 81, 93
 Anjuman River, 70, 72, 97; valley, 66-67, 87, 94
 Arghandab, river, 133n.
 Arghandeh, 279
 Arghor, 228
 Asia Minor, ix, 128
 Athens, 18n.
 Baba Mountains. *See* Koh-i-Baba.
 Babylonia, 168
 Badakhshan, vi, xiii, 3, 17, 19, 26-50 *passim*, 64-72 *passim*, 105, 113, 118, 125, 127, 128, 139, 164, 183, 189, 191, 258, 274, 278
 Bagdad, Iraq, 18n.
 Bagh-i-Mir, 38, 42n., 126
 Baghlan, 30-31
 Baghni, 188, 202
 Bala Balook, 146-147
 Baluchistan, ix, xii, 6, 23, 129, 144, 181, 195
 Bamian, xi, 28, 128, 261
 Barack, 46, 49, 63
 Bazdari, 179
 Belgrade, 18n.
 Bergan River, 247-248, 251
 Berlin, 18n.
 Besha Mountains. *See* Koh-i-Besha.
 Binie Gao, river, 259-260
 Bokhara, ix
 Bombay, 187, 278
 Butkhak, 13
 Caspian Sea, xii
 Chah-i-Ab, 42n., 111, 118-127 *passim*
 Chah-i-Jahan, 162
 Chakhcharan, 170, 268
 Chalap Dalan, 170
 Chaman, India, 187
 Chardeh, plain of, 15
 Charikar, 25, 26, 27, 29, 44, 46, 81
 Chil-con-Shar, valley, 119-120
 China, 18n., 43n., 44, 46
 Chowgoni, 121
 Dakka, hoe, 7-8, 11, 30
 Da'la'man, 15
 Damascus, Syria, 18n.
 Daraim, 101
 Dar-es-Salam. *See* Da'la'man.
 Dasht-i-Amari, 101-103
 Daulatobod, 148-149, 150, 163
 Dei Zengi, 251, 260, 264
 Delhi, xii, 3
 Dera, 198-200, 201
 Dera Hoot, 238, 243, 246, 249
 Dera Rud, 198, 200
 Dia Mountains. *See* Koh-i-Dia.
 Dilaram, 133, 136n., 142, 188
 Doab, 28-29, 126
 Doshi, 29, 30
 Duang, 29, 35, 36, 64, 105, 109, 111, 114, 117-120, 124, 125
 Durmay Pass, 230, 234, 247
 England, v, 14n., 129, 132. *See also* Great Britain.
 Faizabad, 35, 39-50 *passim*, 63-71 *passim*, 98-114 *passim*, 126, 139, 140
 Faolad, 185-186
 Farangi Pass, 178, 180
 Farhad River, 181, 182
 Farinjal, 27

- Farkhar, vi, 89, 96-97, 98
 Farrah, 22, 132, 133, 134, 136-137, 142, 144, 145-146, 161, 163, 171, 180, 187, 209, 273
 Farrah Rud, 132, 137, 150, 152, 154, 163, 164, 170, 171, 185; valley, 133, 146
 Fatehabad, 7, 11
 France, xii
- Gao Gardan Pass, 267, 270-271
 Gardez, 128
 Germany, 18, 117
 Ghaf, 251, 258
 Gharmai, 54, 66
 Ghazni, xiii, 22, 130-131, 132, 134, 135, 142, 168, 234
 Ghazoor, valley of, 247, 249
 Ghizao, 225, 229-253 *passim*, 267
 Ghor, vi, xii, 128, 130, 134, 165, 168, 170, 174-191 *passim*, 196, 202, 265, 278. *See also* Taimani.
 Ghor River, 163-169 *passim*, 175-176
 Ghorband River, valley, 26, 27, 30
 Ghor kingdom. *See* Ghor.
 Girishk, vi, xiv, 133, 136, 142, 171, 185-191 *passim*, 265, 275
 Govergin, 224-226, 229, 230, 248, 253
 Great Britain, xii-xvi, 134. *See also* England.
 Gulistan, 170, 171, 175, 177, 181, 191, 202, 265
 Gurz, 181-182, 185, 196
- Haft Kala River. *See* Tagao Haft Kala.
 Haibak, xi, 29
 Hari Rud, 165, 255, 268; valley, 133, 135, 137
 Hazarajat, 23, 127, 128, 165, 170, 187, 189, 200, 213n., 238, 243, 249-251, 258-260, 273-274
 Helmand desert, x
 Helmand Mountains, 231, 236, 248
 Helmand River, vi, ix, 3, 130, 132, 133, 152, 181, 187-192 *passim*, 200, 208, 213n., 215, 223-240 *passim*, 245-249 *passim*, 256, 257, 259, 271, 275-279 *passim*; valley, 130, 192, 222-234 *passim*, 258, 265, 267, 270, 276
 Herat, vi, xii-xvi *passim*, 16, 26, 128-142 *passim*, 159n., 161, 165, 170, 260
 Himalayas, ix, 128
 Hindu Kush Mountains, ix, 15, 16, 22, 25, 26-28, 31, 35, 43n., 44, 45, 46, 63, 67, 70, 87, 108, 118, 128, 129, 139n., 270
- Hindustan, 13. *See also* India.
 Hormuz, Strait of, 168
- India, v-xvii *passim*, 2-13 *passim*, 17-29 *passim*, 42, 43n., 44, 63, 64, 103, 108, 127-134 *passim*, 144, 161, 168, 187, 190, 195, 269, 278
 Indian Ocean, ix, 278
 Indus River, ix, xiii, 168; valley, 3, 278
 Iran, ix, 29, 118, 129, 135, 137, 138, 139, 141, 142-144. *See also* Persia.
 Ishkashim, 44
 Islam Kala, 137-144 *passim*
 Italy, 14n., 18n.
- Jagdalak, 12, 19
 Jalalabad, xiii, xiv, 6, 7, 8-11, 30, 135, 268
 Jam Kala, 165, 166, 176, 178, 190
 Jamrud, Fort, India, 4-5, 6
 Jamshed, 188
 Jang Kala, castle of, 275-276
 Jao Kol, 279
 Jaoz, 253-254
 Japan, 18n., 19, 36, 132
 Joe Palal, 258-259
 Jurm, 42n., 45-51, 61, 67, 68, 71, 96
- Kabul, v, vii, xviii, 3-10 *passim*, 13-28 *passim*, 34-38 *passim*, 42-46 *passim*, 50, 54-58 *passim*, 67, 70, 81-85 *passim*, 96, 97, 108, 111n., 113, 126-136 *passim*, 139n., 140, 159n., 161, 168, 170, 186-192 *passim*, 196, 206, 212, 214, 234, 235, 251, 255-261 *passim*, 265, 266, 269, 273, 277, 278, 279; government, vii, xi-xvi *passim*, 23-24, 63-66, 75, 105, 107, 109, 125, 135, 138, 142, 195, 202, 210, 216, 217, 233, 270, 277-280 *passim*
 Kabul River, 4, 6, 7, 11, 27; valley, xi, 8, 130, 131, 279
 Kafir Kala. *See* Islam Kala.
 Kafir-i-Stan, 26, 57, 138n. *See also* Kafiristan.
 Kafiristan, 3, 8, 45, 56. *See also* Kafir-i-Stan.
 Kaisar Mountains. *See* Koh-i-Kaisar.
 Kaj River. *See* Khod River.
 Kala Aoghan, 98-99
 Kala Nao, 267
 Kalach, 231-232, 233
 Kalat-i-Ghilzai, xiv, 130, 131, 135, 142, 186
 Kalieleigh, 230, 234

- Kandahar, vi, x-xvi *passim*, 6, 16, 26, 57, 128-136 *passim*, 142, 144, 187, 192, 217, 223, 225-226, 237, 258, 265
- Kanisk, 146
- Karachi, India, 3, 278
- Kasab, 116, 117
- Kashgar, China, 8, 44
- Kashmir, India, ix, xii, xiii, 5, 15
- Kataghan, 35, 38, 42n., 43, 67, 217, 229
- Kensan Mountains. *See* Koh-i-Kensan.
- Khaiek, 228-229, 230
- Khairabad. *See* Barack.
- Khanabad, 26-30 *passim*, 33-38, 42n., 43-50 *passim*, 50, 96, 98, 105, 107, 126, 261, 262
- Khasar River. *See* Ab-i-Khasar.
- Khash Rud, 132, 133, 170, 180, 185, 227
- Khiv, ix, 26
- Khod River, 213, 215, 217, 221, 223, 224, 225, 238, 244, 245
- Khonak, 254, 256-257
- Khonak Pass, 254-255, 257
- Khost, 128, 268
- Khuni, 200-209 *passim*, 253
- Khurasan, xii
- Khurd Kabul, 12-13
- Khurd Mountains. *See* Koh-i-Khurd.
- Khurd River. *See* Khod River.
- Khwaja Muhammed Mountains, vii, 39, 43n., 41, 54, 66, 82, 83, 85, 86, 95, 98, 108
- Khwaja Sarbur. *See* Koh-i-Khwaja Sarbur.
- Khyber, depot, x, xii, 2
- Khyber Pass, v, vi, xiii, xiv, 2-8 *passim*, 12, 17, 23, 28, 108, 128, 129, 138n., 168, 268, 269
- Kishm, 54, 66, 101
- Kishm River, 101; valley, 38-39, 43n., 99
- Kishy, 213n.
- Kishy Valley, 211-213, 215, 224, 253
- Koab-i-Mehzari, 28
- Koh-i-Baba, ix, 255, 261, 271, 275, 276, 279
- Koh-i-Besha, 152, 162, 171
- Koh-i-Dia, 249
- Koh-i-Kaisar, 165, 171
- Koh-i-Kensan, 231, 249
- Koh-i-Khurd, 213n., 217, 220, 221, 236, 244, 246, 248
- Koh-i-Khwaja Sarbur, 152, 155, 156
- Koh-i-Stan, 3, 25, 26
- Koh-i-Verna, 192, 200, 215, 217, 222, 255
- Koh-i-Waras. *See* Waras Mountains.
- Kokcha River, vi, 35, 40, 42n., 43n., 44, 45, 46, 70, 72, 74, 101, 109, 114, 126; valley, 39, 44, 45, 51-54, 58-70, 84, 101-103
- Kokhar River, 236, 243-244
- Kotel-i-Durmay. *See* Durmay Pass.
- Kotel-i-Farangi. *See* Farangi Pass.
- Kotel-i-Regan, 244
- Kotel-i-Wursach. *See* Wursach Pass.
- Kuhsan, 135
- Kujran River, 220-221
- Kunar River, valley, 8
- Kunduz, 36, 40-41, 43n-44
- Kunduz River, 27, 28, 29, 30, 33, 36, 43n.; valley, 26, 31
- Laghman, 8
- Lahore, India, xiii
- Lajar Mountain, 175, 176
- Lajar Pass, 176
- Landi Kotal, India, 5, 6
- Langar, 208-210, 211
- Lataband Pass, 38
- Loe Dakka. *See* Dakka.
- Lower Robat, 59-60, 67. *See also* Robat.
- Mamaki, 280
- Marak, stream, 276
- Mashad, 39, 99-100
- Mazik Dasht, 114, 115
- Media, x
- Merv, Turkoman, 168
- Meshed, Iran, 144
- Mezar-i-Sharif, 26, 28, 29, 43
- Mongolia, ix, 128, 134, 168, 258
- Mukur, 135n.
- Mula Kala, 166, 177
- Musa Kala, 188-190, 191, 192, 197, 201, 202, 213n., 252
- Musa Kala River, 181, 188, 192, 193, 197, 198
- Naozad, 183-185, 188, 201
- Nile, village, 177
- Nimla, 9, 11-12
- Nizgan, 163, 164, 165, 171
- Noor Aba, 120-125 *passim*
- Nuer-i-Stan, 138n. *See also* Kafir-i-Stan.
- Obeh, 135
- Oxus River, ix, xii, 27, 29, 44, 45, 111, 117, 118, 120, 121, 124, 168, 270; valley, 44, 115, 118; plain, 121, 126. *See also* Amu Daria.

- Paghman, 15
 Paghman Mountains, 15, 25
 Palestine, x
 Pamirs, mountains, ix, 5, 40, 44, 46, 139n.
 Panj Ab, river, 248. *See also* Panjao River.
 Panjao, 251, 260, 261-266, 267, 270, 274
 Panjao, river, 248, 259-260
 Parjaman, 163-165, 166-177 *passim*, 182
 Parjaman River, valley, 166
 Parwara, 63-69, 70-75 *passim*, 105
 Pas Kuran, 72
 Peerjawat, 213n.
 Persia, xi, xii, xiii, xiv, 115, 130, 131, 134. *See also* Iran.
 Peshawar, India, v, xii, xiii, xiv, 2-4, 5, 6, 7, 11, 19, 22, 28, 129
 Pew River. *See* Ab-i-Pew, Talikhan River.
 Pitawa Kal, river. *See* Panjas.
 Pul-i-Khomri, 29, 30
 Pul-i-Madan, bridge, 61, 63, 65, 68, 69, 72
 Pul-i-Shema, 42n., 126
 Punjab, India, xii, xiii, 5

 Quetta, Baluchistan, 2, 6, 129, 144, 187

 Rangan River, 245-246, 248, 255, 256, 257; valley, 255-256
 Regan Pass. *See* Kotel-i-Regan.
 Regrawan Pass, 180, 188
 Rhodes, 18n.
 Robat, valley of, 74. *See also* Lower Robat.
 Roshanabad, 192, 202
 Rud-i-Dera. *See* Dera Rud.
 Rud-i-Musa Kala. *See* Musa Kala River.
 Rud-i-Ranga. *See* Rangan River.
 Russia, ix, xii, xiv, xv, 43n., 64, 70, 105, 110-111, 115, 117, 120, 128, 129, 130, 134, 270. *See also* Soviet Union.
 Rustak, 42n.

 Sabzawar, 133-134, 137, 142, 154-155, 156-165 *passim*, 186, 187, 195, 213, 273. *See also* Sheendan.
 Safed Koh, mountains, xii, 11
 Samarkand, ix, 26
 Sang-i-Khah, 121
 Sar-i-Aw, 213n.
 Sar-i-Pul, 29
 Sar-i-Teznai, 196

 Seb Talkh, 169, 171, 172-174, 175, 177
 Seb Talkh River, 169, 172; valley, 171
 Seistan, ix, 130, 132, 168, 275
 Shah Jouy, 213n.
 Shahidan, 193, 194
 Shahr-i-Buzurg, 114, 117, 121
 Shahr-i-Munjan, 63
 Shal-i-Gird, 196-197
 Shaoz, 152, 153, 154, 162, 163, 164, 165, 185
 Sharan, 245, 246, 248, 249, 255
 Shebar Pass, ix, 27-28, 44, 126
 Sheendan, 133, 158. *See also* Sabzawar.
 Sher Dahan Pass, 130, 135
 Sherpur, 14
 Shiwa, Lake, 278
 Sia Sang, 213n.
 Shiahband Range, 181
 Siberia, ix
 Sind, India, xii
 Sinkiang province, China, 43n.
 Skarzar, 70-77, 78-84 *passim*, 97
 Sodat Kala, 186, 188
 Soviet Union, vi, ix, 36, 117. *See also* Russia.
 Suez, 3
 Suf, 221, 224
 Sultan Robat, 248, 259
 Surkh-Ab, river, 11, 12
 Surkhbad Mountains, 276
 Surkh-Pul, 12

 Tagao Ghor. *See* Ghor River.
 Tagao Haft Kala, 165
 Taiabad, Iran, 141, 142, 143
 Taimani, 165. *See also* Ghor.
 Taiwara, 165, 166, 167-172, 175, 176, 178
 Tajwin, 179-180, 227
 Talikhan, 42n.
 Talikhan River, 42n., 89n.; valley, 38. *See also* Ab-i-Pew.
 Tarnak River, 130, 131
 Teheran, Persia, 18n.
 Torkham, India, 7
 Transvaal Republic, 75
 Tulak, 165
 Turbat-i-Shaikh Jam, Iran, 141
 Turkey, xvi
 Turkistan, 6, 25, 26, 29, 41, 44, 115, 145; Afghan, x, xiii, 2, 23, 29, 128; Russian, ix, xii
 Turkoman, 119, 134

 Uni, valley junction, 203, 204

- Uni Pass, 127, 128, 129, 187, 261, 267,
273, 274, 275, 279
Urazgan, 186-187, 200, 226, 231, 238
Urta Tagai, island, 118
Uzbekistan, Soviet, 38

Wakhan, 39, 43n., 44
Waras, in Helmand valley, 246-247, 249
Waras, on Tagao Ghor, 166-167, 169-175
passim
Waras Mountains, 249-259 *passim*, 279
Waras Pass, 257, 274, 279
Waziristan, India, ix, 128

Wursach, 89, 90-94, 95, 96, 108
Wursach Pass, 89, 95

Yakdan, 213-214, 215-217, 220-225 *passim*, 230, 238, 253
Yossafabad, Iran, 141, 143. *See also*
Taiabad.

Zarmardan, 147, 148, 149-150, 151-153,
155, 163
Zarnai, 247, 248, 249, 258, 270
Zebak, 44, 46, 63, 64, 66, 67, 72, 75
Zirni, 176, 177-178

